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REPORT

# The Nexus of Economic Security and the Economics of Security. A Transatlantic Assessment of Key Dynamics in International Trade and Security Policies

edited by Aspen Institute Italia

Report

# *The nexus of economic security: A Transatlantic assessment of key dynamics in international trade and security policies*

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# THE NEXUS OF ECONOMIC SECURITY: A TRANSATLANTIC ASSESSMENT OF KEY DYNAMICS IN INTERNATIONAL TRADE AND SECURITY POLICIES

Roberto Menotti[1]

It is a widely shared assessment that the international system is undergoing a disorderly and dangerous transformation toward a more confrontational and conflict-prone setup. Economic and security issues influence each other generating a potential feedback loop of uncertainty and volatility that makes miscalculations more likely.

All EU countries, as well as the UK and other potential EU partners, are reassessing the evolution of global trade in terms of tariffs and other obstacles to the flow of goods and services, in terms of growing competition from China in critical sectors and value chains, and in terms of security of supply (energy, strategic materials, microchips, etc.). The policy choices that are being considered by political leaders in this context are also affected by more traditional security and defense concerns where NATO remains the key framework, despite significant frictions between the two sides of the Atlantic.

Transatlantic relations, also due to more widely political dynamics, have already entered a new phase (regardless of short term political developments), and it is essential for European leaders to understand where US priorities lie and how Europe can better organize itself to collectively define and pursue its own core interests.

As these concerns continue to emerge and take center stage, a well articulated concept of economic security is needed to frame policy decisions. The present collective work attempts to better identify the key concepts and priorities, and on this basis the authors of the individual contributions have been asked to put forth a set of policy proposals at the intersection of economics and defense.

Our approach is based on an effort to connect and integrate economic and defense questions in a policy-relevant manner – keeping in mind the importance of the transatlantic relationship, for all its ups and downs and the looming uncertainty.

Defense policies are part of a broader set of decisions on resource allocation that require wide consent by public opinion, for two distinct reasons: first, citizens are increasingly skeptical of political institutions in liberal democracies but also critical of market mechanisms in their current incarnation; second, "whole of society" responses are more needed than ever in an era of hybrid threats. To complicate matters, the average fiscal space for European governments is tightly constrained, just as the trade environment has become more hostile than in the past.

New technologies lie at the intersection of economics and defense, offering opportunities to modernize and optimize weapons systems but also putting the slower and less effective innovators at a great disadvantage vis-à-vis their competitors.

The core concept of economic security provides a useful framework. As Stormy Annika Mildner and Claudia Schmucker argue,

"Geopolitical rivalry, Russia's war against Ukraine, the COVID-19 pandemic, technological competition, and the growing use of economic dependencies as instruments of pressure have unsettled a central premise of the post-Cold War economic order: that deeper interdependence

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would primarily enhance efficiency, prosperity, and stability. These benefits have not disappeared. But governments increasingly assess supply chains, technology, investment, infrastructure, and market access through the lenses of vulnerability, resilience, power, and strategic leverage."

Economic security can be understood across three major dimensions: the security of the economy (the capacity to withstand shocks, manage critical dependencies, protect essential infrastructure, and maintain access to strategically important goods and technologies); security by economic means (the use of sanctions, export controls, tariffs, investment restrictions, market access, and other economic instruments to advance foreign- and security-policy objectives); the economic and technological foundations of power itself (industrial capacity, advanced technologies, critical minerals, energy, financial strength, and market size as factor that determine governments' capacity to act strategically).

All of these factors are affecting European options and Transatlantic relations, as they reflect deep forces at play that predate the Trump era.

The current debate on economic tools, (re)defined to some extent as the arsenal of "economic warfare", actually originated in the US under the Obama administrations[2]. However, politics and methods do matter: the concepts and operational tools that were developed at the time were designed to achieve specific results through targeted and limited measures, mostly exercising pressure on adversaries (not close allies) and sending messages that were rather predictable and easy to interpret – virtually the opposite of an approach centered on shifting tariffs used as forms of weapons deployed mostly against allies and partners. Economic sanctions, unlike tariffs, send a very specific message and can be better integrated with other policy tools.

Ironically, even the Trump administration seems to have belatedly recognized the need for a more integrated policy toolkit (including the threat and actual use of military force) in the case of Iran, with the announced plan, in late August, to fully isolate the country economically. Treasury of the Secretary Scott Bessent illustrated the plan in some detail in an article in the Financial Times (August 23, "*Scott Bessent: an economic D-Day is coming for Iran*").

Bessent went as far as to specifically state that "*total financial isolation (of Iran) can obviate the need for American force while enlarging the sphere of freedom for our allies*" – which begs the question of why Washington did not apply this logic before launching military operations in February, rather than after.

In any case, the current US administration seems to behave as if it is trapped between the will to exploit its leverage to its full potential and the recognition that interdependence creates mutual contraints even when dealing with much less powerful adversaries. The step it is not willing to take, however, is to work with allies in a multilateral setting: the current blockade of Iranian ports coupled with the financial isolation of Iran falls under the rubric of unilateral statecraft, whatever its ultimate effectiveness in pressuring Tehran.

This is relevant to Transatlantic relations because the Iranian case can truly be seen as a litmus test of an overall approach to contemporary forms of interdependence that the Transatlantic partners – not just the US – will have to better develop, articulate and fine-tune, in dealing with problematic countries such as China and Russia in the context of ongoing or future crises over Ukraine, Taiwan, North Korea, among others.

Indeed, as the US attempted to tackle the economics-security nexus in various ways through the Obama, Trump, Biden and second Trump administrations, the EU developed its own conceopts and policy tools. The 2021 trade strategy introduced the concept of "open strategic autonomy", and the European Economic Security Strategy of 2023 and subsequent documents broadened the agenda by

[2] See in particular Edward Fishman, "*Chokepoints. American Power in the Age of Economic Warfare*", Portfolio/Penguin, 2025.

identifying supply chains, critical infrastructure, technology leakage, and economic coercion as strategic risks.
The European approach can be summarized in three objectives: "protect, promote, and partner", placing greater weight on diversification within a rules-based framework with partners than the unilateral/bilateral bargaining tactics preferred by Trump. The diagnosis is probably correct on the European side but the therapy is certainly insufficient to solve the problem, due to the well known limitations in terms of resources, industrial base and joint procurement. However, it is worth noting that across the Atlantic the two sides differ not just in economic structure, technological capabilities, and exposure to external dependencies, but also in threat assessment (at least is some areas).
Against this background, broad Transatlantic policy convergence is unrealistic for the moment. Some level of cooperation is feasible and in fact essential, especially in the NATO context, but the pursuit of economic security is pushing the US and the Europeans in different directions.

**The challenge of managing interdependencies, the growth problem and the middle tech trap**
The starting point of a rational and constructive Euro-American conversation on economics and security must be the strength and unique nature of the Transatlantic economy – the most deeply integrated economic area in the world.
There are significant costs associated to the choice of disentangling the economies on the two sides of the Atlantic – even selectively and in specific sectors. The level of integration is not always fully appreciated by political leaders and public opinion, yet it is a crucial component of the current prosperity and growth prospects of all the countries involved.
As Erik Jones argues, "European and American firms are stronger and more resilient thanks to the diversification of revenue sources and supply chains, as much of the trade across the Atlantic takes place within firms rather than between them".
In parallel, however, we have become all too aware that transatlantic economic integration also generates specific forms of interdependence that may become problematic for either partner, especially under certain domestic political conditions.
The key forms of interdependence are critical raw materials or manufacturing inputs, intellectual properties, shared market infrastructures, increasing returns to scale or other forms of natural monopolies, strategic industries or other assets. These elements are essential to the functioning of all advanced economies and tend to interact with each other, creating a complex web of dependencies, form of leverage and mutual influences.
From Europe's perspective, the fundamental "growth problem" is typically framed in terms of industrial competitiveness but should be tackled by focusing on the services sector and innovation policy. In the words of Daniel Gros,
"Services are crucial because they account for most of the economy, have lagged in productivity, and will be central to the diffusion of artificial intelligence. Despite the nearly constant emphasis on manufacturing in policy debates, the EU's internal market remains much less complete for services than for goods. Innovation policy matters because European industry seems stuck in a middle tech trap. It remains concentrated in middle-technology sectors, that have only weak long-term growth prospects, where firms innovate incrementally but do not invest in new disruptive, risky, but also potentially high-growth activities."
As recognized in the Draghi Report, as well as in many other policy documents and independent analyses, the EU countries suffer from insufficient investment in the high-tech sectors that are driving the US and the Chinese economies. Looking forward, the main productivity gains in AI will derive from its adoption in services, and productivity gains, in turn, will form the basis for growth

and further innovation – all key ingredients of a vibrant economy that can also afford and support more effective security policies.

**The energy factor between excessive dependence and structural transition**

The energy "trilemma" is at the core of policy debates in advanced economies: the difficult balance between security of supply, affordable cost, and environmental sustainability.

The Russian invasion of Ukraine has radically changed the equation, with the near-complete replacement of Russian gas resolving the EU's security-of-supply variable at the expense of the cost variable.

Now, with the continuing fibrillations in the Middle East, the European Union has been deepening its dependence on North American LNG to unprecedented levels (a fourfold increase since 2021).

This might look like a triumph of friend-shoring, except that the level of trust across the Atlantic is at record lows and as a consequence.

Therefore, in a broader perspective the Russian gas crisis, followed by the conflict in the Strait of Hormuz and the uncertainty over the viability of Bab el-Mandab, have exposed the geopolitical risks inherent in fossil energy sources and in their supply chains.

In parallel, Europe has had to manage the China factor: a policy of selective openness to China (even in the face of recurrent pressure from the US), according to José María Calvo-Sotelo, "served it well so long as the EU exported high-value-added products to China while benefiting from the 'importation of productivity' of the Chinese economy—productivity from which Europe has drawn considerable advantage in its energy transition. Now, however, the tables have turned, and Chinese exports to Europe outstripped European exports to China by two and a half times in 2025. And while Europe looked on unmoved as its photovoltaic industry was annihilated by Chinese competition over the past decade, it now faces a far greater challenge: how to protect industries far more crucial—such as automotive, which employs 13 million people and contributes 7% of GDP—from Chinese imports. This is why the issue is no longer merely the security of supply chains, but a broader concept: the economic security of the EU."

The major challenge of excessive dependence is not short term but structural – having to do with entire industrial sectors.

**The high-tech sphere as vulnerability or competitive edge**

High-tech is increasingly considered an area both at the center stage of global competition and where the European Union is at a disadvantage vis-à-vis the United States and China. The key factors in this process are the pace of technological change (and looking forward especially the transformative nature of artificial intelligence as a general-purpose technology), and economic security competition (particularly between the United States and China) where technological chokepoints, including rare earths and artificial intelligence systems, are frequently weaponized through tools such as export controls.

The impact of the so-called China Shock 2.0 (focused on high-end manufacturing) and of the likely China Shock 3.0 (focused on artificial intelligence system but also physical AI and robotics) could be even more significant than expected, in the coming years, coupled with the enduring burden of energy costs on European companies through the energy grid.

We can add a specific form of cognitive vulnerability: a lack of public-private sector coordination in the European Union, which limits the available knowledge regarding key vulnerabilities. This is one additional reason why the EU remains more exposed to external shocks than the United States, China and other players within tech supply chains, for instance Asian players like South Korea,

Taiwan and Japan (as their concepts of economic security are based on a constant coordination between the private and the public sectors).
The inadequate implementation of the Draghi Report – almost unanimously hailed as a convincing framework – shows that the gap between diagnosis and execution is itself a chokepoint of a different kind: an institutional chokepoint, caused not by any external force but by the Union's own unanimity requirements, national vetoes and fragmented fiscal capacity.
As Alessandro Aresu argues:
"Since the COVID-19 pandemic, we have experienced several crises which were considered 'wake-up calls' for Europe and have exposed a series of European vulnerabilities in this age of weaponization of geographical and technological chokepoints. The European Commission has presented several documents to tackle the issue of economic security, but their impact has been limited, so far, given the bottom-up approach of the regulations proposed."

**Connecting dots, integrating policy tools: rethink strategy and overcome cost barriers to modernize European defense**
The former Finance Minister of Poland, Mateusz Szczurek, has identified a major analytical and policy challenge in a *Financial Times* article (July 15, 2026):

"Europe is having two arguments in two separate rooms and it would make faster progress if it noticed they were about the same basic problem. In one room, economists debate how to create a common safe asset for the bloc — a deep, liquid stock of high-quality debt to anchor portfolios and strengthen the international role of the euro. There have been some ingenious ideas, […] but they all run aground on the same rock: a bond needs a source of repayment, and the EU has never managed to agree on joint resources to provide one. In the other room, defence officials debate how to pay for the air defence, surveillance and resilient communication networks that no single member state can build at sufficient scale, leaving Europe dependent on the US. The EU's flagship answer, the €150bn Safe programme, lends money to national capitals to buy their own kit. While it has the upside of expanding the stock of EU bonds, it risks further entrenching fragmentation in defence procurement. Europe today fields a dozen types of main battle tank to America's one."
Indeed, the technical challenges of integrating the financial tools, defense budgets, weapons systems of the various European countries is compounded by the conceptual problem of policy decisions that are often discussed and made in different silos.
In the words of Julian Lindley-French and Robbie Boyd,
"For too long economic security and military security have been seen by political establishments as mutually exclusive, but they are not. President Trump's *America First* policy and his threat to reduce US forces in Europe also reflects the growing world-wide pressures on U.S. forces caused by the military rise of China. The threats to Canadians and Europeans is thus structural not merely political and will not abate when Trump leaves the White House in 2029."
On this side of the Atlantic it is thus crucial to recognize that there is a need for increased funding but also that the character of war is undergoing a rapid and profound transformation – from analogue heavy metal platforms to digital AI-driven systems. The major problem is a lack of digitally enabled warfighting maneuver forces and a sufficient mass of force. Effective defense now depends on fusing platforms and systems and national efforts with overall deterrence and defense effect, by adopting emerging disruptive and destructive technologies.
In this context, the priority is to break down the cost barriers to defense modernization.
More specifically, as our authors argue,

"There can be no international resilience without societal resilience in a transnational cross border community of open societies. Credible defense and deterrence is not simply about capable armed forces; it also depends on credible people protection. The power projection vital to contemporary defense will not be possible without credible protection of the home base. Power projection and people protection are the two sides of any sound defense. Strengthening societal resilience, in turn, depends on strategic public private partnerships within states, between states and institutions, and increasingly with the private sector."
Small and medium enterprises (SME) are the true source of innovation and too often blocked by the cost barriers to market entry, so they have a key role to play in the technological and defense base and in a secured supply chain. What Europe is glaringly lacking is a research, development and procurement system that overcomes national vested interests to ensure the integration of high technology that is affordable and can be fielded rapidly.

**The US factor, looking forward**
Facing the propect of two remaining years of Trump administration and of the 2028 presidential election, it is essential for the Europeans to both tackle short term policy challenges emanating from Washington and plan for the longer term. Against this background, Bradly Johnston argues that
"From Europe, it is easy to read U.S. trade politics through the lens of the transatlantic relationship. But many of the pressures shaping Democratic trade policy are domestic. Manufacturing, affordability, China, organized labor and the role of government in supporting American industry are all central to the debate. Europe is affected by the choices that follow, but it is rarely at their center. […] Democrats are trying to define an approach of their own: one that accepts trade policy as part of a more enduring industrial policy, while placing greater emphasis on institutional oversight, clearer legal authority and more predictable use."

States such as Michigan, Wisconsin and Pennsylvania, where manufacturing is central to economic prosperity, remain central to any Democratic path back to the White House. This directly affects the trade policy choices realistically available to members of Congress. So, as Johnston puts it,
"The question for most Democrats is no longer whether trade policy should be active. It is what kind of trade policy best serves the coalition they need to govern."
Three main questions will have to be addressed. The first is legal – an ongoing debate about which authorities should be used, when they should be used. The second is institutional - a debate over who should control tariffs, as for many Democrats, the priority is less reversing existing trade measures than restoring Congress's role in trade policy and placing greater limits on executive authority. The third question is political – as any Democratic trade agenda has to address organized labor, manufacturing-state pressures, and a broader coalition that is developing a new trade consensus.
Similar considerations can be made on defense issues, on which the Democrats have so far harshly criticized some major decisions by the administration but still have to articulate a fully shared position of their own – a process that will be affected by both budget constraints and foreign policy goals more generally. Indeed, Democrats are far from united on defense policy especially when it comes to spending and the extent of US commitments abroad, but tend to agree on maintaining a strong US defense industrial base. The goal of "burden shifting" with NATO is likely to be pursued by any US administration, albeit with different methods: in a nutshell, Democrats will tend to support greater European defense spending while opposing "Buy European" requirements for fear of damaging American manufacturers.

**Thirteen policy proposals**

On the basis of the overall "economic security" framework and its various ramifications, the authors have put forth a series of practical policy proposals addressed to European leaders, which are articulated in more detail in the individual papers. The proposals are listed below in the same thematic order as the previous chapters.

1. Define more clearly what constitutes an economic-security risk. A narrower definition would make it easier to distinguish such risks from conventional commercial disputes so that economic security does not become an open-ended justification for protectionism.

2. Create a focused Transatlantic mechanism for early consultation. This should build on the economic-security commitments already contained in the 2025 US-EU trade framework but be specific in content, given the lack of interest in the US for broad regulatory conversations.

3. Turn critical-minerals cooperation into joint projects. Practical business operations are the best way for the Europeans to work together, whenever possible by also involving US companies.

4. Continue to work on reducing Europe's structural dependence in critical technologies. In particular, as in The Chips Act 2.0, proposed in June 2026 as part of a broader Tech Sovereignty Package, a key task is to increase the capacity to shape global semiconductor networks in specific niches such as power electronics, microcontrollers and photonics, and the value chain of quantum technology. Previous programs had focused on market share, but industrial niches are actually more important, particularly when they are organized in ecosystems, because it is within industrial niches that chokepoints and vulnerabilities emerge.

5. Preserve openness while strengthening defenses against coercion. This is in the spirit of "Open strategic autonomy" that characterized the early incarnations of the EU's drive to develop more autonomy vis-à-vis both its key ally (the US) and immediate or potential adversaries.

6. Do not tackle one dependency problem at a time, but try to rewire the pattern of interdependence. This should be done in such a way as to match resources, technology, infrastructure, industry, and strategic capability so that it insulates Europeans from foreign manipulation and shifts leverage back to European policymakers.

7. Establish a "Competitiveness Fund" tasked with funding ideas and teams rather than protecting existing firms, insulating EU innovation instruments from short-term political priorities, and strengthening risk-capital markets. The aim should not be to increase the share of industry to some value it had in the past, but on the contrary, accepting that innovation happens mostly in the services sector.

8. As major changes in the energy sector illustrate, the EU should seek alliances with third countries (starting with the US, despite differences in opinions and perceptions) that have a similar interest in reducing their dependence on China, not only to diversify its access to natural resources but also to build a new industrial fabric and alternative supply chains. Europe does not have the market scale nor the financial muscle to rebuild on its own the supply chains it has lost, nor can the United States hope to contain China without the economic and commercial weight of the European market.

9. Establish a "Chokepoint Observatory", designed to conduct yearly confidential geoeconomic stress tests on the most concentrated dependencies (already partly identified by the Chips Act's monitoring framework and by the Critical Raw Materials Act's own supply-chain mapping) adding the chemical and the pharma industry. It could also publish aggregate exposure levels while keeping company-specific findings restricted to the Commission and the relevant member states, as prudential methodology already does for individual banks. The goal is not to predict every shock in advance, which is very unlikely, but to replace improvisation with a quick institutional mechanism, bringing industrial players on board.

10. In terms of defense assets and capabilities, a credible European defense structure acting credibly both as a deterrent and a defense asset must be built on and around an Allied Command Operations Mobile Heavy Force (AMHF) that goes well beyond the current Allied Reaction Force (ARF). The AHMF consolidate all Allied European-based rapid response forces into one single pool of forces supported by the requisite force structure. The AMHF would need be capable of operating under EU, EPC, NATO and Third Country command and designed to exploit emerging disruptive and destructive technologies while maintaining a high degree of interoperability with fast evolving US forces. The AMHF would also help promote better and improved intelligence sharing, which has been noticeably absent in the past twenty years. This is vital, at the very least to demonstrate a shared determination to attribute grey zone warfare attacks to perpetrators as part of autonomous Allied deterrence.

11. Promote public private partnerships as the key to funding the urgently needed defense innovation. Public-private partnerships are essential, and will have to built on the following pillars:

- a profound change of mindset on the part of policymakers
- industry's engagement early in planning
- new legal and procedural processes are needed to protect, leverage and mobilize populations during the transition between peace and war
- new foresight techniques to develop strategic deterrence and resilience communication plans and public messaging campaigns for future war scenarios
- collective training and exercising with allies and partners to test physical, digital and societal resilience, strengthen partnerships and better understand communication networks
- regular exercises to be conducted by and with government and industry to test the whole of society's resilience during future war scenarios
- minimum critical resilience requirements across the financial and economic and information and communications sectors.

12. Use an investment vehicle designed specifically to break down the cost barrier to defense modernization: the Defence, Security and Resilience Bank (DSRB). This offers a chance to break out of the defense crisis through the creation of a strategic public private partnership with the banking and financial sector. The purpose is to offer AAA backed cheap defense loans that mature over many years, a bit like the Lend Lease Act of 1941. The subsequent debt will be placed in a protected account. One particular aim of the DSRB would be to prevent Canadians and Europeans from economic dependency on potentially malign actors such as China, in part by financing new global secure supply chains by using the DSRB's ability to convene its global member states, other multinational development banks and commercial banks and investors to blend financing at speed to build new secure supply chains free of adversary control.

13. Carefully evaluate the political space available to work with a post-Trump administration on economic/trade and security/defense issues of common interest. Europe has spent years asking whether Democrats will undo President Trump's trade agenda. Even assuming a Republican defeat in the 2028 presidential race, the more important question is what kind of alternative agenda Democrats are ultimately prepared to pursue.

## Economic security in the EU and the United States: One challenge, two playbooks?

Claudia Schmucker / Stormy-Annika Mildner[3]

### Setting the scene: Economic security between resilience and power

Few concepts have moved as rapidly to the center of economic policy-making in both the European Union (EU) and the United States as economic security. Geopolitical rivalry, Russia's war against Ukraine, the COVID-19 pandemic, technological competition, and the growing use of economic dependencies as instruments of pressure have unsettled a central premise of the post-Cold War economic order: that deeper interdependence would primarily enhance efficiency, prosperity, and stability. These benefits have not disappeared. But governments increasingly assess supply chains, technology, investment, infrastructure, and market access through the lenses of vulnerability, resilience, power, and strategic leverage.

Economic security encompasses at least three dimensions. The first is the security of the economy: the capacity to withstand shocks, manage critical dependencies, protect essential infrastructure, and maintain access to strategically important goods and technologies. The second is security by economic means: the use of sanctions, export controls, tariffs, investment restrictions, market access, and other economic instruments to advance foreign- and security-policy objectives. The third concerns the economic and technological foundations of power itself. Industrial capacity, advanced technologies, critical minerals, energy, financial strength, and market size determine not only competitiveness but also governments' capacity to act strategically.

The United States and the European Union have converged on some aspects of these three dimensions of economic security. Both want more resilient supply chains, stronger protection of sensitive technologies, greater scrutiny of foreign investment, and less dependence on China in strategically important sectors. Both have also moved away from the assumption that markets alone will produce economically or strategically desirable outcomes. However, there are also considerable divergences.

For the United States, particularly under the second Trump administration, economic security is increasingly tied to maintaining technological leadership, rebuilding domestic industrial capacity, and converting US economic weight into strategic leverage against all trading partners. As such, Washington does not shy away from using economic tools as political leverage, also against the EU. For the EU, economic security is more strongly associated with resilience: reducing excessive dependencies, preserving openness, and expanding Europe's ability to make autonomous policy choices. These differences are not merely semantic, but shape the selection and use of instruments. And they create frictions in the Transatlantic partnership. Against this backdrop, the question remains: is there still room for Transatlantic cooperation on economic security?

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**The United States: From resilience to economic leverage**

The securitization of US economic policy did not begin with Trump's return to office in 2025. The first Trump administration made "economic security is national security" a guiding principle, strengthened investment screening through the Foreign Investment Risk Review Modernization Act (FIRRMA), expanded the use of Section 232 tariffs, tightened export controls toward China, and placed greater emphasis on reshoring and the domestic industrial base.

The Biden administration changed the rhetoric and placed greater emphasis on cooperation with allies, but it did not reverse this trajectory. Rather, it broadened and institutionalized it. The CHIPS and Science Act and the Inflation Reduction Act (IRA) combined industrial policy with supply-chain and security objectives. Export controls introduced in 2022 and 2023 sought to restrict China's access to advanced semiconductors and semiconductor manufacturing equipment. Investment policy increasingly addressed not only foreign investment into the United States through CFIUS, but also US investment in sensitive technologies in China. At the same time, friendshoring and the EU-US Trade and Technology Council (TTC) sought to embed resilience in networks of trusted partners.

Trump II has taken this logic further on the basis of an America First ideology. Three features stand out.

First, (inter)dependence is increasingly equated with vulnerability. Resilience is therefore no longer primarily about diversification but increasingly means producing strategically important goods in the United States, attracting foreign investment, securing raw materials, and rebuilding domestic manufacturing capacity.

Second, economic relations are assessed more explicitly in terms of relative gains. The question is not only whether trade generates economic benefits, but where production takes place, who controls technology and intellectual property, and which country gains strategic capabilities. This logic extends beyond China. Bilateral trade deficits, foreign subsidies, market access, and the location of investment have all become part of the economic-security debate.

Third, US economic power is increasingly treated as a source of leverage. Tariffs are the clearest example. Since 2025, the Trump administration has relied on Section 232 for strategic sectors such as steel, aluminum, automobiles, copper, and drones. It turned to Section 122 after the Supreme Court struck down the use of IEEPA for broad tariffs and expanded the use of Section 301 investigations against foreign economic practices. Tariffs therefore serve several purposes simultaneously: protecting domestic industries, incentivizing investment in the United States, reducing imports, generating revenue, and creating bargaining leverage in negotiations with all trading partners, including the EU. This logic has increasingly extended beyond trade policy in a narrow sense. Economic measures are also being used, or threatened, to influence broader political and strategic decisions. The Greenland dispute in January 2026 is a case in point. President Trump threatened a 10% tariff on imports from several European countries in connection with the dispute over Greenland, linking access to the US market directly to a geopolitical objective. This episode prompted discussions in the EU about possible trade countermeasures and the use of the Anti-Coercion Instrument, while the European Commission stressed that such pressure raised broader questions of European sovereignty and territorial integrity. More broadly, Trump II has expanded the use of economic leverage beyond relations with strategic competitors. Pressure is increasingly applied to close allies as well, making economic instruments a more explicit element of US statecraft within alliance relationships.

A similar logic applies to technology. US export controls under the Export Administration Regulations (EAR) and the Foreign Direct Product Rules (FDPR) give Washington considerable

reach into international production networks. China remains the principal target. At the same time, Trump combines restrictions on competitors with efforts to expand the global footprint of US technology, for example through the American AI Exports Program. Economic security is therefore both defensive and offensive: restricting rivals' access to critical technologies while expanding the international reach of the US technology ecosystem.

The United States continues to rely on international trade and foreign investment. But integration has become more selective, conditional, and transactional. This is also reflected in the administration's approach to trade agreements. Country-specific trade deals have become an increasingly important vehicle for linking tariff treatment to wider economic commitments by the trading partners. Recent arrangements with Japan, the United Kingdom, South Korea, and the EU make US tariff cuts or tariff ceilings dependent on investment pledges, purchases of US goods and energy, market-access concessions, and, in some cases, cooperation on supply chains, export controls, and investment security. In this sense, these "agreements" function less as traditional trade-liberalization frameworks than as negotiated packages ("managed trade") in which access to the US market is exchanged for broader economic and strategic commitments. This shift also has implications for the multilateral trading system. By relying more heavily on differentiated bilateral treatment and negotiated tariff ceilings, the administration has moved away from the WTO's core logic of non-discrimination and most-favored-nation treatment.

**The European Union: Security through resilience**

The EU has undergone a profound shift of its own. The 2021 trade strategy already introduced the concept of "open strategic autonomy." The European Economic Security Strategy of 2023 and the Doctrine from 2025 broadened the agenda further by identifying supply chains, critical infrastructure, technology leakage, and economic coercion as strategic risks.

However, Europe starts from a different economic and geopolitical position. The EU is considerably more dependent on international trade and cross-border production networks than the United States. It is also less dominant in several of the technologies and economic infrastructures that increasingly underpin geopolitical power. European economic security therefore cannot realistically be based primarily on reshoring or on restricting economic relations with large parts of the global economy.

The European approach can instead be summarized through three objectives: protect, promote, and partner. The first objective is to reduce exposure to economic and security risks. The EU has strengthened foreign-investment screening, sought greater coordination of national export controls, expanded trade-defense capabilities, and created the Anti-Coercion Instrument. There are also discussions on a new diversification instrument as well as a new "second strike" instrument. These instruments reflect a basic lesson from recent crises: openness requires safeguards when economic relations can be exploited for political purposes. However, important structural constraints remain. In several areas, implementation still depends heavily on the EU member states. Export-control policy is a prominent example. The EU provides a common legal framework and a common dual-use list, but national governments retain significant authority over licensing and additional controls. The same holds true for investment screening. Given different risk perceptions, this can result in divergent practices precisely when US measures are becoming more centralized and strategically coordinated.

The "promote" dimension of the EU's economic-security agenda reflects a broader shift in the way economic vulnerability is understood. The focus is no longer limited to screening potentially risky

transactions or restricting access to sensitive technologies. Instruments such as the EU Chips Act, the Critical Raw Materials Act, clean-technology initiatives, and measures to strengthen defense-industrial capacity indicate that productive and technological capabilities are increasingly treated as part of economic security itself. This is particularly relevant in sectors where Europe depends on a limited number of external suppliers. The nature of these dependencies varies considerably. In the case of China, concerns are concentrated in critical raw materials, processing capacity, and selected manufacturing inputs, where geopolitical rivalry and the potential for economic coercion are central considerations. Dependence on the United States is different in character, but significant in areas such as cloud infrastructure, advanced AI capabilities, semiconductors, and digital services. These dependencies can affect Europe's room for maneuver where alternative suppliers or domestic capabilities are limited.

The third pillar, "partner", builds on the EU's continued dependence on open and diversified external economic relations. Access to international markets, capital, technology, energy, and raw materials remain central to both European competitiveness and economic security. Diversification therefore plays a key role in reducing exposure to concentrated dependencies. Trade agreements, raw materials partnerships, cooperation with the Indo-Pacific, and closer relations with countries in and around the CPTPP are part of this broader effort to widen the range of suppliers, markets, and strategic economic partners.

Recent trade agreements illustrate this shift. The EU-Mercosur Trade Agreement has been provisionally applied since May 2026, expanding access to the markets of Argentina, Brazil, Paraguay, and Uruguay. Its significance extends beyond additional export opportunities: closer economic integration with Mercosur broadens the EU's commercial ties with a region that is also important for agricultural commodities, energy, and raw materials. In January 2026, the EU also concluded negotiations on its Free Trade Agreement with India. The agreement would eliminate or reduce tariffs on more than 96% of EU goods exports and deepen economic ties with a rapidly growing economy that has also become an increasingly important partner in technology and economic-security cooperation. Negotiations with Australia were concluded in March 2026, complementing the existing EU-Australia strategic partnership on critical raw materials and strengthening the EU's economic links with a major Indo-Pacific economy and CPTPP member. The modernized agreement with Mexico, signed in May 2026, adds a somewhat different dimension. It updates an already deep trade and investment relationship and includes provisions aimed at facilitating access to and processing of raw materials. Mexico's close integration into North American production networks also makes the agreement relevant to the diversification of European supply chains beyond the bilateral EU-Mexico relationship itself. Similarly, the EU-Indonesia Comprehensive Economic Partnership Agreement, negotiations which were finalized in September 2025, combine improved market access with an explicit emphasis on supply-chain diversification, energy, raw materials, and digital trade. In addition, the EU and the Philippines reached a substantial agreement on a bilateral FTA in September 2026.

The WTO remains an important part of this approach. For the EU, diversification through bilateral and regional agreements is embedded in a broader interest in preserving a predictable multilateral trading framework. This has become more difficult as the WTO's negotiating and dispute-settlement functions have weakened and trade policy has become increasingly shaped by subsidies, industrial policy, national-security measures, and unilateral restrictions. The EU has therefore linked its support for the WTO more closely to reform. In 2026, it proposed stronger disciplines on distortive state intervention, greater transparency, more effective remedies, and reforms to decision-making, while explicitly raising the question of how economic-security considerations can be accommodated

within WTO rules.

This marks an important difference in emphasis between the European and US economic security approaches. While US policy under Trump II increasingly relies on bilateral bargaining and the strategic use of market access (power-based trade), the EU continues to place greater weight on diversification within a rules-based framework with partners.

**Transatlantic relations: Convergence without alignment**

The United States and the European Union share a substantial part of the underlying economic-security diagnosis. Both are concerned about China's strong position in critical-mineral processing and selected manufacturing sectors, about the transfer of sensitive technologies with potential military applications, and about concentrated dependencies in strategically important supply chains. Semiconductors, critical minerals, defense production, digital infrastructure, and advanced technologies have therefore become central areas of transatlantic economic-security cooperation.

This convergence is most pronounced where vulnerabilities are clearly shared and where neither side can address them effectively on its own. The EU-US Critical Minerals Supply Chain Resilience Action Plan of April 2026 and European participation in Pax Silica illustrate this logic. Both initiatives seek to reduce exposure to concentrated supply chains and to coordinate investment, sourcing, standards, and technology-related cooperation among trusted partners. At the same time, they also reveal the more limited institutional basis of current cooperation. Compared with the Biden-era TTC, coordination is narrower, more issue-specific, depending on the national interest and less embedded in a broader framework for managing economic-security spillovers. Many of the operational elements of the newer initiatives, including financing arrangements, offtake mechanisms, common standards, and rules for preferential access, remain underdeveloped.

The limits of convergence become most visible in the trade policy relationship. The Turnberry agreement of July 2025 contained an escalating tariff dispute and build on the hope for greater predictability by capping most US tariffs on European goods at 15%. Steel and aluminum remained subject to substantially higher duties, while the EU accepted significant commitments on market access, energy purchases, investment, and broader economic-security cooperation. The agreement therefore reduced some uncertainty (with a lot of caveats) without removing the underlying asymmetry in bargaining power. US access to its domestic market became an explicit negotiating asset, while Europe's dependence on the broader transatlantic security relationship narrowed its room for maneuver. The Greenland dispute in January 2026 further exposed this asymmetry. The threat of additional US tariffs against several European countries linked trade pressure directly to a geopolitical dispute. The resulting debate over possible recourse to the EU's Anti-Coercion Instrument reflected a broader shift in European risk assessment.

The same asymmetry is visible in technology. The United States and the EU share an interest in protecting sensitive technologies, reducing strategic dependencies, and limiting transfers that could strengthen China's military and technological capabilities. However, they start from different positions. The United States holds leading positions in several critical technologies and increasingly treats technological leadership as a source of strategic power. The EU is more dependent on external providers while seeking to strengthen its own technological capabilities and digital sovereignty.

Semiconductors illustrate both the need for cooperation and the potential for conflict. US restrictions on China's access to advanced chips are more effective when key suppliers outside the United States adopt corresponding controls, particularly in areas such as advanced lithography equipment. European cooperation therefore strengthens the effectiveness of US technology policy toward China. The conflict arises from the extraterritorial reach of US export controls. Because US-origin software,

equipment, and technology are embedded throughout global semiconductor production, Washington can restrict certain transactions by European firms even where equivalent measures have not been adopted in Europe. This gives the United States a form of regulatory leverage over European commercial activity and allows US policy choices to shape the conditions under which European companies can operate in third-country markets.

Industrial policy creates a further source of transatlantic friction. Both the United States and the EU are expanding support for semiconductors, AI infrastructure, critical-mineral processing, defense, and advanced manufacturing. These policies can strengthen collective resilience by reducing dependence on China, but they also intensify competition over where strategic capacity is built.

**5. What follows? Five priorities for Transatlantic economic security**

The transatlantic relationship remains central to both European and US economic security. The United States and the EU are each other's most important economic and strategic partners, and cooperation is particularly important in areas such as critical technologies, supply chains, defense, infrastructure, and the response to economic coercion. At the same time, transatlantic relations have become more conflictual. The EU is oftentimes no longer seen as an ally, and the two sides differ in economic structure, technological capabilities, exposure to external dependencies, and, in some areas, threat assessment.

Against this background, broad policy convergence is unrealistic. Cooperation is most feasible where both sides face a clearly shared external vulnerability and where coordinated action materially increases security – for example in critical minerals, selected semiconductor controls, defense-related supply chains, and responses to Chinese export restrictions or economic coercion. It becomes more difficult where US and European policies compete directly – for example over tariffs and market access, the location of new semiconductor or AI investment, or the international position of US and European technology firms.

*1. Define more clearly what constitutes an economic-security risk*

Transatlantic coordination should focus on dependencies that combine strategic importance with high concentration, limited alternatives, and a credible risk of disruption or coercion. This would include, for example, Chinese dominance in the processing of selected critical minerals, access to advanced semiconductor technologies with military applications, and vulnerabilities in defense-related supply chains. A narrower definition would also make it easier to distinguish such risks from conventional commercial disputes and reduce the risk that economic security becomes an open-ended justification for protectionism.

*2. Create a focused mechanism for early consultation*

The end of the TTC has removed the main forum in which Washington and Brussels discussed measures before they affected firms and supply chains on the other side of the Atlantic. Recreating the TTC in its previous form is unlikely under the Trump administration. A narrower mechanism, however, could build on the economic-security commitments already contained in the 2025 US-EU trade framework. Its focus should be limited to areas where coordination produces identifiable benefits for both sides, mostly in the tech sector, including semiconductor export controls, investment screening, critical minerals, and responses to Chinese non-market practices.

Such a mechanism would be more credible if it were organized around concrete projects rather than broad regulatory dialogue, which is of no interest to the United States. In semiconductor policy, for example, US restrictions are more effective when key European and Asian suppliers adopt

corresponding controls – if common interests align. In critical minerals, coordinated financing, processing projects, and responses to Chinese export restrictions could serve similarly tangible interests. The purpose would be early consultation where unilateral measures have substantial cross-border effects, while preserving each side's ability to act independently.

*3. Turn critical-minerals cooperation into joint projects*

The April 2026 EU-US Critical Minerals Supply Chain Resilience Action Plan and cooperation through Pax Silica provide a framework, but the central challenge is implementation. Both sides remain exposed to Chinese dominance in refining and processing and are simultaneously competing for the same alternative mining projects and processing capacity.

Cooperation should therefore concentrate on increasing non-Chinese supply. This could include joint financing of mining and processing projects, coordinated support for refining capacity, long-term offtake agreements, and common standards for projects in third countries. The aim would be to expand the number of viable suppliers rather than allowing US and European subsidy programs to compete for the same limited pool of projects.

*4. Reduce Europe's structural dependence in critical technologies*

Europe's economic-security vulnerability is not primarily a shortage of defensive instruments. It lies in limited domestic capacity in areas such as advanced semiconductors, cloud infrastructure, AI compute, defense production, and parts of the critical-minerals value chain. These dependencies matter because they reduce the number of alternatives available when US policy changes or when access to foreign technology becomes politically conditional. Deeper capital markets, more investment in digital and energy infrastructure, greater defense-industrial scale, and faster growth of European technology firms would reduce asymmetric dependence.

*5. Preserve openness while strengthening defenses against coercion*

Europe has more to lose than the United States from a broad fragmentation of the global trading system. Its economy remains more dependent on external markets, imported raw materials, cross-border investment, and internationally integrated production networks. Trade agreements with partners such as Mercosur, India, Australia, Mexico, and Indonesia therefore have an economic-security function in addition to their traditional market-access role: they diversify suppliers, markets, and production networks.

Openness, however, also requires credible defenses where dependencies are used politically. The Greenland dispute illustrated that such pressure could come not only from China or Russia, but also from within the transatlantic relationship. The EU's Anti-Coercion Instrument, trade-defense measures, investment screening, and targeted export controls are therefore relevant not as substitutes for openness, but as instruments for limiting the political exploitation of asymmetric dependence.

## Rethinking healthy intrdependence across the Atlantic

Erik Jones[4]

### Healthy interdependence?

Transatlantic trade and investment play an important role in the growth of economies on both sides of the Atlantic. This is the message Daniel S. Hamilton and Joseph P. Quinlan have been documenting in annual reports published over the last 23 years. More important, they argue, the role of trade is significantly lower than the role of investment. Of course, Europe and the United States are each other's largest trading partners, particularly when you combine the trade in services with the trade in manufactures. But even at a combined $2.3 trillion in 2025, the Transatlantic trade in goods and services is less than a third of the $7.5 trillion in sales made by European affiliates based in the United States and US affiliates based in Europe, and less than a tenth of the combined $29 trillion in assets held by Europeans in the United States or Americans in Europe.[i]

When you add this together, the North Atlantic economy is not only the most deeply integrated in the world, but it is also hugely advantageous for both sides of the Atlantic. European and American firms are made stronger and more resilient through the diversification of revenue sources and supply chains. This explains why much of the trade across the Atlantic takes place within firms rather than between them. The share of intra-industry trade is higher for the European Union (EU) (at 65% of EU exports to the United States) than for the United States (at 40% of exports to the EU plus the United Kingdom), but the difference is exaggerated by the special case of Ireland (93% of Irish exports to the United States) and by the fact that the Europe is the United States' largest market for coal, oil, and liquified natural gas (LNG).[ii] Those energy-related exports make up roughly 16% of total U.S. merchandise exports to Europe.

Europeans and Americans also share substantial intellectual property either through licensing or through other business services like consulting or finance. American firms invest heavily in research and development (R&D) in Europe, and European firms invest in R&D in the United States.[iii] In all this activity, they use many of the same financial institutions – both American and European – and digital infrastructures, including a very dense collection of fibre optic cables running between Europe and the United States.[iv] It is unsurprising, therefore, that Hamilton and Quinlan conclude: 'inevitable Transatlantic differences should not distract [Europeans and Americans] from the fact that ours is the most mutually beneficial relationship on the planet. Divorce is something we literally cannot afford.'[v]

The assumption Hamilton and Quinlan make is that the relationship is a 'healthy' one. Indeed, they state that explicitly with reference to the employment gains: 'We estimate that more than 16 million European and American workers owe their livelihoods to a *healthy* Transatlantic economy' (emphasis added).[vi] That notion of 'health' has both cyclical and structural dimensions. Hamilton and Quinlan have a strong argument that economic integration across the Atlantic makes both Europe and the United States more resilient in cyclical terms, as earnings in one market can offset losses in another as a kind of self-reinforcing portfolio diversification effect.[vii]

What they leave unexplored is whether and how Transatlantic economic integration creates specific forms of interdependence that are or may become challenging for either partner. Of particular

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concern are those forms of interdependence that can be used by one side of the Atlantic to gain leverage over the other. The divorce metaphor is revealing in this respect. Many close partners cannot 'afford' divorce, but they recognise that living together in an abusive relationship is worse.

**Sources of vulnerability**

These structural health considerations revolve around five different forms of interdependence relating to:

- critical raw materials or manufacturing inputs;
- foundational intellectual properties, including those related to material use;
- shared market infrastructures;
- increasing returns to scale or other forms of natural monopolies;
- strategic industries or other assets.

These elements are ubiquitous in advanced industrial economies. They become important only when one party or another has influence over them that it can use to exercise leverage over other countries.

Used as a filter, these categories cast a different light on the pattern of Transatlantic economic integration. The predominance of American suppliers in European markets for oil, coal, and LNG is a good illustration. In principle, this represents a classic case of comparative advantage. Texas exports energy resources it has in relative abundance and imports machinery, transportation equipment, or chemical manufactures from Europe.[viii] In practice, however, Texas will find it easier to substitute away from European imports, than Europeans will find it to substitute away from Texas hydrocarbons – particularly having moved away from sourcing hydrocarbons from Russia and facing political turmoil in the Gulf region. When President Trump threatens to slow down LNG exports to Europe, that gives him leverage.[ix]

Foundational intellectual properties would include the architecture for advanced chip designs that is developed in California. This architecture is what guides the etchings that are made with extreme ultraviolet lithography chip printing devices made by ASML in the Netherlands. Again, this looks like comparative advantage with one side of the Atlantic focusing on one part of the value change and the other specialising elsewhere. In practice, the US government can threaten to withdraw ASML's license to use the underlying chip architecture with its machines while the Dutch government has no ability to prevent US chip architecture and design firms like NVIDIA, Intel, or AMD from relying on other equipment makers to do the printing.[x] In this sense, it is not enough for Europe to generate advanced technologies that complement rather than competing with technologies developed in the United States, it is also important to look where they sit in the global value chain and how they connect to intellectual property rights.

Shared market infrastructures include organisations like the Society for Worldwide Interbank Financial Telecommunications (SWIFT). This organisation is based in Europe, where it is set up as a cooperative under Belgian law. The banks that use SWIFT to communicate around individual transactions and post-trade activities are its owners. This would seem to be a truly shared resource, but many who sit on SWIFT's board of directors and many of the banks they represent are based in New York. Therefore, when the first Obama Administration sought to cut Iranian banks out of the network against SWIFT's initial opposition, it passed legislation through Congress making it possible to sanction those board members (as individuals) rather than sanctioning the cooperative itself.[xi] The first Trump administration used that same legislation to force SWIFT to reimpose sanctions on Iran in 2018 against the opposition of European governments. This SWIFT illustration

is important because it is a European cooperative. The influence of the US government over other shared market infrastructures like those used for US dollar clearing or data transfer is even greater.[xii] Here we get a different perception of the trade in services insofar as the relative balance between imports and exports matters less than who controls how the trade is managed.

Software ecosystems, digital platforms, cloud computing, and large language models provide examples of increasing returns to scale. These are business models that rapidly grow into effective monopolies because of the network dynamics they create. In turn, successful firms begin to take on infrastructural characteristics, pulling in increasing activity that reinforces their advantages in the marketplace. Here again, the focus shifts from the relative balance between imports and exports to who controls how the trade is managed. In this case, however, the businesses have the ability to engineer locking-in effects that allow them to claim an ever-greater share of the value added in any exchange.[xiii] The European Union can push back against such efforts using its authority over competition policy, but that is a slow process with only mixed effectiveness – particularly once the leaders of those effective monopolies line up support from the government of the United States.

The classic example of strategic industries or assets is the competition between Boeing and Airbus in the commercial aviation sector. The capital and innovation required to compete in the sector are high enough that only a small number of firms are likely to achieve a critical mass, with other relegated to niche parts of the market. Hence government policies – whether through direct subsidies or indirect forms of public procurement – can play a decisive role in ensuring competitive advantage. In this case, European governments clubbed together to use strategic industrial policy effectively enough to push back against an American firm supported by extensive cross-subsidies through US defense procurement.[xiv] What too close a focus on Airbus obscures, however, is how US defense procurement patterns ensured that the United States would have an advantage in terms of other forms of aviation, from strategic lift to stealth bombers and advanced fighter aircraft or reusable launch vehicles and communications shells based on low-earth orbital satellites. European success with Airbus does not translate automatically into an ability to duplicate these strategic assets.

The different forms of vulnerability also tend to interact. A foundational intellectual property for electricity storage can lock in the use of a critical raw material for fast-recharging and portable batteries, like lithium, and so create an opportunity for a firm like Tesla to try to dominate a critical industrial sector like electric vehicles through its control over the charging infrastructure, the software ecosystem, and favourable access to the low-earth orbital communications sphere. Of course, other firms can challenge Tesla for dominance. But few will succeed unless they can match its advantages in at least some of these structural features – foundational technology, material access, market infrastructure, effective monopoly, and implicit government subsidy. The data for Transatlantic economic integration tell us very little about those dynamics or how they might be used by political actors on one side of the Atlantic to gain leverage over those on the other. Whether the interdependence it creates is 'healthy' depends less upon the business cycle than how key parts of the economy are wired together.

**Strategy for autonomy**

This understanding of vulnerability is not new. A similar diagnosis can be found in classic works like E.H. Carr's *The Twenty Years' Crisis* (originally published in 1939) or more popular books like Jean-Jacques Servan-Schrieber's *Le défi américain* (originally published in 1967).[xv] The technologies have evolved and our understanding of how network dynamics create increasing returns to scale has deepened, but the underlying analysis of how economic interdependence creates vulnerabilities

that can be manipulated remains consistent. So does the strategy for mitigating that vulnerability to reestablish policy autonomy. The goal is not to tackle one problem at a time. It is to rewire the pattern of interdependence in such a way as to match resources, technology, infrastructure, industry, and strategic capability so that it insulates Europeans from foreign manipulation and ultimately shifts leverage back to European policymakers.

The modern metaphor for this strategy is the 'stack', which is a concept used in software engineering to capture the relationship between the physical hardware, machine interface, operating system, programming languages, applications, and user interface. Microsoft only seeks to control everything from the operating system onward; Apple tries to control the whole stack. The contrast between the two strategies is key to understanding how the two companies compete in the marketplace. That metaphor can be extended to include the wider digital environment – power grids, data centers, cables, nodes, domain name servers, platforms, marketplaces, search engines, large language models, etc. The point of the 'stack' is to emphasize is how interdependence, hierarchy, vulnerability, and competitiveness are interconnected.

European policymakers need to reengineer four 'stacks' in order to ensure the health of the Transatlantic economy from a European perspective. Those stacks relate to finance, energy, digital technologies, and defense. Each of these stacks is different from the others in terms of how it is put together and where are the important points of vulnerability and leverage, which explains why the policy conversation surrounding them suddenly becomes technical and complicated. To penetrate those debates, the important point is to focus on the strategic objective – which is to acquire sufficient control to reassert policy autonomy.

The policy debate about banking union, capital markets union, or savings and investment union is a good illustration. The explicit goal as set out in the reports by former Italian prime ministers Enrico Letta and Mario Draghi is to use European savings to finance European investment to foster greater European innovation that can be used to create new industries, products, and technologies (Letta) or to foster greater productivity growth more generally (Draghi). This will require a reengineering of the Transatlantic financial economy to facilitate cross-border investment within Europe, to broaden the opportunities for European investors to take on risk, to streamline the execution of post-trade activities, and to ensure the provision of adequate liquidity without moving through dollar-denominated clearing. This will not be easy, but it will ensure that European investment does not have to flow through shared market infrastructures or financial institutions that create sources of vulnerability and it should ensure that any resulting intellectual property is registered (and hence protected) within Europe.

The policy debate around energy and climate action follows a similar logic that in many ways complements the debate about finance. The goal is to reduce European dependence on imported fossil fuels and other critical raw materials while at the same time creating the infrastructure necessary to support an economy and transport system based increasingly on electricity. The difference is the degree to which this energy and climate strategy focuses on material substitution (away from hydrocarbons but also, where possible, other relative scarce resources like lithium or rare earth magnets). In the short term, this will rely on imports of other technologies for energy generation, storage, and transmission. In the longer term, it will require innovation in new technologies to underpin manufacturing processes that rely on materials Europe can acquire more reliably. It will also depend on Europe's ability to control those new technologies rather than have them be subject to foreign manipulation. The financial requirements for this investment in innovation and infrastructure are immense, which is what makes the link to finance.

The digital and defense requirements for reengineering the Transatlantic economy will necessarily build on these efforts related to finance and energy. Nevertheless, these are areas where U.S. control over the relevant stacks is even greater than it is for finance and energy. Therefore, they require more comprehensive analysis.

*Notes*

[1] Daniel S. Hamilton and Joseph P. Quinlan, *The Transatlantic Economy, 2026: Annual Survey of Jobs, Trade, and Investment between the United States and Europe* (Washington, D.C.: Foreign Policy Institute, Johns Hopkins University SAIS/Transatlantic Leadership Network, 2026). Much of the data is summarized on pages 3-6. The estimates for the stock of assets are on page 35.
[2] Hamilton and Quinlan, *The Transatlantic Economy*, pp. 31, 54.
[3] Hamilton and Quinlan, *The Transatlantic Economy*, pp. 23, 45.
[4] Hamilton and Quinlan, *The Transatlantic Economy*, pp. 50, 53.
[5] Hamilton and Quinlan, *The Transatlantic Economy*, p. 60.
[6] Hamilton and Quinlan, *The Transatlantic Economy*, p. 41.
[7] Hamilton and Quinlan, *The Transatlantic Economy*, pp. 39-40.
[8] Hamilton and Quinlan, *The Transatlantic Economy*, p. 107.
[9] See, for example, Andy Bounds and Henry Foy, 'US Warns EU to Pass Trade Deal or Risk Losing "Favourable" Access to LNG,' *Financial Times* (23 March 2026) https://www.ft.com/content/6bf153e4-11af-44d5-9d1c-48b5c7ad26ef?syn-25a6b1a6=1.
[10] Agathe Demarais, *Backfire: How Sanctions Reshape the World Against U.S. Interests* (New York: Columbia University Press, 2022) chapter 10.
[11] See section 220 of Public Law 112-158, August 10, 2012 (https://www.congress.gov/112/plaws/publ158/PLAW-112publ158.pdf).
[12] See, for example, Henry Farrell and Abraham Newman, *Underground Empire: How America Weaponized the World Economy* (London: Penguin Books, 2023).
[13] See Diane Coyle, *Cogs and Monsters: What Economics Is and What It Should Be* (Princeton: Princeton University Press, 2021).
[14] See, John G. Francis and Alex F. Pevzner, 'Airbus and Boeing: Strengths and Limitations of Strong States,' *Political Science Quarterly* 121:4 (Winter 2006/2007) pp. 629-651.
[15] E.H. Carr, *The Twenty Years' Crisis, 1919-1939: Reissued with a New Preface from Michael Cox* (Basingstoke: Palgrave Macmillan, 2016); Jean-Jacques Servan-Schrieber, *Le défi américain* (Paris: Denoël, 1967).

## A realistic two-pillar innovation growth strategy for Europe

Daniel Gros[5]

Europe's growth problem is often framed as an industrial competitiveness problem. This paper argues that a more realistic strategy should rest on two pillars: opening fragmented business-services markets and reforming innovation policy to support disruptive ideas rather than established incumbents.

Services matter because they account for most of the economy, have lagged in productivity, and will be central to the diffusion of artificial intelligence. The EU's internal market remains much less complete for services than for goods, limiting competition, scale and the spread of efficient business models across borders. A targeted move towards mutual recognition for business-to-business services could therefore deliver significant gains without reopening the politically most contentious parts of the services agenda.

Innovation policy matters because European industry seems stuck in a middle tech trap. It remains concentrated in middle-technology sectors where firms innovate incrementally but do not invest in new disruptive, risky, but also potentially high-growth activities. Escaping this trap requires funding ideas and teams rather than protecting existing firms, insulating EU innovation instruments from short-term political priorities, and strengthening risk-capital markets.

The strategy proposed here is deliberately modest in its promises but ambitious in its direction: it does not rely on protectionism or a large increase in the EU budget, but on competition, institutional reform and a better allocation of Europe's innovative capacity.

**Services: the forgotten key to growth**

Productivity in the EU has lagged especially in the services sector, which has been slow to adopt information technologies and exploit economies of scale. This suggests weak competitive pressures. Since the services sector is much larger than manufacturing, this sector merits much more attention than it receives in these days dominated by concerns about energy prices and Chinese competition. Many analyses of the European economy confirm that the largest intra-EU barriers are in the services sector. A recent IMF study finds that the existing barriers are equivalent to up to 70-80% tariffs. This number has been disputed on technical grounds. But it is enough to travel across the EU to find numerous examples of services that are totally segmented across borders.

The Commission and the EU institutions in general have been aware of this problem for decades. However, the attempts to integrate the services sector have so far failed. The so-called Bolkestein Directive of 2005 generated enormous resistance, which at the time centered on the gulf in wages between the old and the new Member States. The perceived problem was the Polish plumber outcompeting its colleagues in Paris. Twenty years later wages between East and West are converging rapidly. But the lack of integration in the services sector persists. A recent IMF study argues that the low level of cross-border trade in services within the EU is due to barriers that have implicitly the same effect as tariffs in the order of 70-80%.

The Services Directive thus seems to have had little impact. The key reason is that the Services Directive adopted the country-of-destination principle. This implies that an architect, a computer specialist or a financial analyst must comply with the regulations of the country where she renders the service. A French software engineer thus must know German regulations if she wants to sell her services in Germany. The official justification for adopting the country-of-destination principle was

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to protect consumers who might have difficulties obtaining redress abroad if the foreign service provider did not perform properly.
The true reason was that French plumbers did not want to have to compete with their Polish colleagues in France. Fears of wage dumping were maybe justified when wages in Poland were a fraction of those in the richer old Member States. But this is no longer the case.
Many studies concur that while the internal market is imperfect, the remaining barriers are much higher for services than for goods that can circulate much more freely within the EU because they are subject to the country-of-origin principle. Any good produced in France can be freely sold in Germany and throughout the entire Union. Without strict adherence to this principle, it would have been impossible to create the internal market. National consumer protection rules and regulations on labelling make the internal market less than perfect, but these remaining barriers are not a significant obstacle for most of industry.
There is one way to overcome the resistance from the consumer protection argument to opening the services sector: the country-of-destination principle could be substituted in the Services Directive by the country-of-origin principle for all services rendered to businesses (as opposed to consumers). This small change should not arouse very strong opposition. It would open many important services sectors (like software, business services, etc,) to cross-border competition.
Given that this liberalization would affect only businesses, most of the usual arguments to protect the domestic sector would be much weaker. This change should thus be politically much less contentious than a wholesale liberalization of all services.
Opening the services sector will be key to ensure that European businesses adopt AI generally. The most important productivity gains in AI derive from its adoption in services, rather than industry. Much of European industry operates globally and has the technical knowledge to adopt AI to become more productive, also because they can see what their competitors are doing. As long as national services markets remain protected, its enterprises face little pressure to adopt AI. Opening this market for business services will allow enterprises from those Member States with more modern and efficient services sectors to spread their knowledge throughout the entire Union.
Finally, an efficient services sector is also essential for a competitive industry. The value of manufacturing output has over several years diverged from raw industrial production indices. This indicates that industry is also becoming more and more services intensive.

**Escaping the middle-tech trap**

European industry is specialized in a number of middle tech manufacturing sectors that have only weak long-term growth prospects. There has been too little investment in the high-tech sectors that are driving the US, and also the Chinese economy. This has been called the 'middle tech trap' because European firms concentrate their considerable innovative efforts in the sectors they know best, thus missing growth opportunities in new high-tech sectors. The landmark Draghi Report on European Competitiveness shares this diagnosis.
The specialization of European industry in mid-tech sectors not only reduces its growth potential; it also exposes the European economy to energy price shocks and competition from China. Finding ways to foster change in European industry is thus not only important to increase the growth potential, but also for geopolitical reasons.
Changes in the sectoral specialization of industry will take time. The leading US high-tech firms have not sprung up overnight. Most of them have taken decades to grow from small origins, often financed by venture capital, into the behemoths they are today. The recent virtual explosion of AI led by US firms has thus a broad basis that is missing in Europe. This is why Europe is even further behind on AI than in software in general.

In principle the EU has already levers to foster innovation. There is the European Innovation Council, the European Investment Fund as well as many similar initiatives at the national level. However, all these initiatives have had only a very limited impact. The existing structures are overly bureaucratic. They fund incremental improvements in established companies rather than supporting disruptive startups. This means that EU innovation policy needs to be reformed from the bottom up by shifting from "funding companies to funding ideas". This includes overhauling the European Innovation Council (EIC) empowering leading scientists and engineers to dispense flexible, stage-gated support for radical innovation. This is the way DARPA has worked very successfully in the US helping to establish US technological leadership in many areas.

The key is not so much the amount of public funding available for innovation, but the mechanisms through which it is spent. This is why the structure of the proposed Competitiveness Fund is key. If this fund is used to support changing political priorities and if its funding goes to the established incumbents (that have lobbying power to sway policial priorities) little will be achieved.

A key plank of any innovation strategy must be to isolate the Competitiveness Fund from political influence. The amount proposed, €300bn, for the next MFF would be sufficient.

National multipliers

Member States could greatly enhance the benefits from stronger EU support for innovation if they adopt reforms that increase the availability of risk capital. The many new disruptive ideas a revamped European innovation strategy is likely to create can be picked up and translated into commercial success only if there is enough VC capital available for European start-ups and later regular equity for those that grow to medium and large scale.

The preponderance of bank financing in Europe is one of the reasons why European industry has remained stuck in middle tech sectors. Banks loans are well suited to finance incremental innovations or capacity additions in industries with known technology. But a start-up with a new process or idea needs risk capital. In those Member States with pension funds that invest in equity more risk capital is available. Germany has recently gone in this direction by adopting the Swedish model of putting a small percentage of salaries (2%) into a fund that then would invest in equity.

Putting innovation at the forefront of an industrial strategy can only succeed if other policies are not going in the opposite direction at the same time. For example, protecting industries that are no longer competitive not only wastes precious resources; it also makes it more difficult for new industries to grow. Moreover, the aim of policy is not to increase the share of industry to some value it had in the past (as in the Industrial Accelerator Act), but on the contrary, accepting that innovation happens mostly in the services sector. AI is the key example for this. As with other general-purpose technologies, adoption of AI requires in many cases a complete rethinking of the production process. This is more likely to come from outsiders than the incumbents.

Conclusion

The strategy proposed here is deliberately modest in its promises but ambitious in its direction. It does not claim that Europe can close the growth gap with the United States within a few years, nor that a larger EU fund can by itself transform a continental economy. Its advantage is that it targets two genuine bottlenecks: fragmented services markets and an innovation system biased toward incumbents and incremental change.

Opening business services would increase competition, accelerate the diffusion of artificial intelligence and improve the productivity of firms across the economy. A move towards mutual recognition for business-to-business services would be narrower and politically more feasible than a wholesale reopening of the Services Directive, while still addressing one of the largest remaining gaps in the Single Market.

Reforming innovation policy is the second pillar. Europe does not lack engineering capacity or public funding. Its problem is that too much of the available funding goes to established middle-technology sectors and to programmes that favour incremental improvements by incumbents. A reformed European innovation strategy should give greater autonomy to expert programme managers, tolerate failure, fund ideas and teams at an early stage for projects with genuine disruptive potential. The proposed Competitiveness Fund would be useful only if its management is independent of the Commission to prevent it from becoming another vehicle for politically selected sectors and incumbent firms.

The effectiveness of this agenda would be multiplied through national reforms. In particular, deeper risk-capital markets are essential if new ideas generated by a more effective EU innovation system are to become scalable European firms. Bank finance is well suited to established technologies and predictable cash flows, but it cannot substitute for equity capital in the financing of radical innovation.

The broader lesson is that Europe should not confuse growth policy with the preservation of its existing industrial structure. Policies that protect declining sectors or seek to restore an earlier share of manufacturing risk reinforcing the middle-tech trap. A realistic growth strategy should instead open protected services markets, accelerate AI diffusion, reform innovation funding and create the financial conditions for new firms to grow. The objective should not be to defend the economy Europe has, but to create the conditions for the economy Europe needs.

## European energy security and the Transatlantic relationship: dependence, the China factor and transition technologies

José María Calvo-Sotelo[6]

This chapter examines two challenges to the European Union's energy security and the significance that the relationship with the United States holds in each of them. We refer, first, to the EU's natural gas supply, which has undergone a dramatic shift since Russia's invasion of Ukraine in February 2022; and, second, to China's dominance over the supply chains of the most important energy transition technologies, laid bare over the course of 2025 through export controls on rare earths and batteries. Both challenges, very different in nature, illustrate how Europe, over the past two decades, has jeopardized the supply security of its energy system by opting for the cheapest alternatives. So it went with the bet that Germany and the rest of Central Europe placed on Russian gas, and so it is going across the whole of Europe with the industries key to its energy transition, whose supply chains lie largely under the control of Chinese firms. On both fronts, the importance of the Transatlantic relationship presents itself in different guises and poses distinct challenges and opportunities.

For twenty years, the energy trilemma has dominated forward-looking analysis of the energy systems of advanced economies: the difficult balance between security of supply, affordable cost, and environmental sustainability. The first two variables leapt to the fore with the oil crises of the 1970s, which exposed the enormous concentration of risk that had been vested in the oil-producing countries of the Middle East. Sustainability would take almost forty more years to gain traction, and it did so on the back of the shale oil and gas revolution in North America, which ultimately reversed the supply risks that those first crises had elevated to the geopolitical podium.

The decisive impetus for the environmental variable came with the 2015 Paris Agreement, which enshrined the mandate to hold the rise in global average temperature to 2ºC—and preferably to 1.5ºC—above preindustrial levels. The 2018 IPCC special report set 2050 as the Net Zero horizon, and in 2021 the European Union raised the objective of climate neutrality to the force of law. Thus, by the end of 2021 the Union had mapped out the green transition of its energy system for the following three decades, establishing binding milestones for $CO_2$ emissions reductions by 2030 (Fit for 55) and 2040 (90%) relative to 1990.

With the invasion of Ukraine in February 2022, both the security-of-supply variable and the affordable-cost variable were blown apart across the European Union. In 2021, natural gas accounted for nearly 25% of the EU's primary energy consumption; the EU imported 85% of the gas it consumed, and Russian gas made up 41% of those imports, for a total of 140bcm. Russian gas, which had been the cheapest source of energy, ceased to be a secure one. The EU's coordinated response, driven by Germany as the most heavily affected country, managed to cut the share of Russian gas to 12% of imports by 2025. What is striking is that a change of this magnitude—Germany had no regasification terminal at all in 2022—was achieved in so short a time. In barely two years, Germany's total regasification capacity could meet 30% of its gas consumption. Across the EU as a whole, regasification capacity grew by 45% since the invasion (75bcm). In this way, European LNG imports rose from 23% of the total before the war to 47% in 2025. Viewed by geography, 60% of the gas imported by the EU comes from the United States (29%) and Norway (30%), followed by Algeria at 12% and Qatar at 3%. With the near-complete replacement of Russian gas—which still accounts

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for 15% of the total—the EU's new gas-supply equation has resolved the security-of-supply variable most satisfactorily, at the expense of the cost variable.

Until the onset of the conflict with Iran in February 2026, every outlook for growth in the global LNG market pointed to a marked improvement in both variables of the gas trilemma: security of supply and cost. Indeed, the International Energy Agency (IEA, Gas 2025 report) had projected growth in global liquefaction capacity to 2030 of 300bcm/year, with 60% coming from the United States and 20% from the Middle East (Qatar). At the same time, the IEA estimated that new global demand would be unable to absorb more than 250bcm, with the corresponding downward pressure on prices. But the conflict with Iran will inevitably delay the new projects in Qatar and among the other Middle Eastern producers (60bcm/year). What is more, we still do not know how much of the capacity already installed in the region has been damaged by the bombing.

That being so, with the Middle East out of the game and Russia in its final reckoning, everything points to the European Union deepening its dependence on North American LNG (which already leads the field), with Norwegian gas in second place. Dependence on the United States is reaching heights never seen before: nearly 60% of seaborne imports in the first quarter of 2026, more than four times the figure for the same period in 2021. Meanwhile, gas prices in Europe (Dutch TTF) were trading above €65 per MWh at the end of August—more than double the pre-crisis level before the Strait of Hormuz—though well below the price peaks that followed the invasion of Ukraine (over €300/MWh). Compounding this is an EU gas storage level of 62%, among the lowest of the past twelve years. Should the closure of the strait persist, Asian competition for North American LNG will strain prices further this autumn, precisely when Europe must fill its storage to 80% of capacity.

The war in Ukraine and the Russian gas crisis, and now the conflict in the Strait of Hormuz, have exposed the geopolitical risks inherent in fossil energy sources, in their supply chains, and in the sheer speed with which any disruption is reflected in their prices the world over. By way of counterpoint, the instability of the past four years has markedly reinforced Europe's bet on renewable energy, which is immune to these risks, and also on nuclear power. The green transition has found in "energy sovereignty" a powerful ally for accelerating the decarbonization and electrification of our economies and the transitioning away from fossil fuels agreed at COP 28 in Dubai in 2023. Yet in that very year, China once again gave proof (as it had already done in 2010 with Japan) of the control it exercises over the supply chains of technological sectors key to the energy transition, calling into question the very sovereignty that the transition had seemed to carry under its arm.

Indeed, over the course of 2023, in retaliation for the restrictions the Biden administration had imposed in October 2022 on exports of advanced chips for artificial-intelligence applications, China imposed restrictions and controls on exports to the United States of several essential critical minerals, rare earths, and permanent magnets. The tug-of-war between the two countries would continue in 2024 and worsen in 2025, when the Trump administration added a tariff war to the chip controls. By October of last year, China had broadened its controls to 12 of the 17 rare earths and to all intermediate and final products incorporating them. China further required "foreign organizations" to obtain a dual-use export license for products containing rare earths of Chinese origin or manufactured using Chinese technologies. The extraterritoriality of these measures was squarely within the finest tradition of the US sanctions regime. On top of this, and on the same date, China's Ministry of Commerce introduced for the first time controls on lithium-ion batteries, as well as on their components and the technology and machinery for their manufacture. The supply chains of a great many industrial sectors—high tech and defense, the manufacture of motors for electric

vehicles and of wind turbines—came very close to collapse. At this point, the Trump administration blinked first and agreed to a one-year truce with Xi Jinping. China's show of force, sustained and escalated over two years, had succeeded.

The EU had been a direct casualty of this crossfire between the United States and China, and the President of the Commission, Ursula von der Leyen, accused China of establishing a "pattern of dominance, dependence, and blackmail" to drive its competitors into bankruptcy. Chinese firms are dominant because the People's Republic of China is itself the world's largest consumer of their products: of solar panels, of rare earths and critical minerals, of batteries, of electric vehicles. This near-captive market, together with a vertical integration from well to wheel built up over the years, has been the principal pillar of its competitive strategy as a nation—to borrow from Michael Porter. On those pillars it has built economies of scale and levels of efficiency that its Western competitors find hard to match.

The American and European responses to this pattern of dominance could not have been more different over time. The Trump and Biden administrations alike have favored de-coupling from China, closing the US market to imports of photovoltaic panels and electric vehicles, for instance, by means of very high import tariffs. The 20% drop in Chinese exports to the United States in 2025 is further evidence of the de-coupling of the two economies. But unlike the United States, Europe has never closed its markets to Chinese products, nor to the establishment of Chinese firms on European soil. This policy served it well so long as the EU exported high-value-added products to China while benefiting from the "importation of productivity" of the Chinese economy—productivity from which Europe has drawn considerable advantage in its energy transition. Now, however, the tables have turned, and Chinese exports to Europe outstripped European exports to China by two and a half times in 2025. And while Europe looked on unmoved as its photovoltaic industry was annihilated by Chinese competition over the past decade, it now faces a far greater challenge: how to protect industries far more crucial—such as automotive, which employs 13 million people and contributes 7% of GDP—from Chinese imports. This is why the issue is no longer merely the security of supply chains, but a broader concept: the economic security of the EU.

Advancing toward the EU's goal of energy sovereignty runs through reducing its dependence on imported fossil fuels by accelerating its energy transition toward clean energy (renewables and nuclear) and electrification. But unlike the Russian gas crisis, or that of the Strait of Hormuz, the EU will not manage to reduce its excessive dependence on the Chinese hegemon in four years, nor indeed in a dozen. It is a far more complicated undertaking, in which each industrial sector will demand different approaches, different bets. In order to preserve its economic security, the EU will have to seek alliances with third countries likewise intent on reducing their dependence on China, not only to diversify its access to natural resources but also to build new industrial fabric and alternative supply chains. And it is this author's view that the EU will need the United States in this endeavor (just as it needed it in the exit from the Russian crisis), and that the Transatlantic relationship remains Europe's best card: to join forces with the United States over the medium and long term (even if, in the short term, that looks anything but easy) and, together, to compel China to change the course of its abusive growth model. The EU and the United States share a fundamental interest in not being left at the mercy of the pattern of dominance that China is creating. Neither shore will resolve it alone: Europe does not have the market scale nor the financial muscle to rebuild on its own the supply chains it has lost, nor can the United States hope to contain China without the economic and commercial weight of the European market. Could this lead to a new relationship pattern between the US and the EU in the medium term? A pattern of interdependence and mutual cooperation for the advancement of the two largest economies in the free world.

## Lend-Lease 2: Affording the New Defense

Julian Lindley-French and Robbie Boyd[7]

*"…the thought is that we would take over not all, but a very large number of, future British orders; and when they came off the line, whether they were planes or guns or something else, we would enter into some kind of arrangement for their use by the British on the ground that it was the best thing for American defense, with the understanding that when the show was over, we would get repaid sometime in kind, thereby leaving out the dollar mark in the form of a dollar debt and substituting for it a gentleman's obligation to repay in kind".*

*President Roosevelt outlining what became Lend Lease, December 17, 1940*

The focus of this article is how to break down the soaring cost barriers to beginning defense modernization by the non-US transatlantic allies. While the focus is on Europe, Canada is a vital partner in this endeavor because the European Theater of Operations is contiguous with the North Atlantic and Arctic Theater of Operations. Central to the argument herein is that the future epicenter of Canadian and European deterrence and defense effort will be an enormous space that stretches from the Arctic and the High North to the Azores and from eastern to southern Europe. Therefore, the core questions this article addresses are how to overcome the cost barriers to defense modernization and how to foster the required changes to the Canadian and European Defense, Technological and Industrial Base (CEDTIB) that is the key to modernization. This is not simply about the need for increased funding. Whilst the nature of war remains a brutal constant that character of war is undergoing a transformation from analogue heavy metal platforms to digital AI-driven systems. Sound defense will only be possible if Canadians and Europeans successfully fuse platforms and systems and national efforts with overall deterrence and defense effect. That is why the New Defense is needed built on emerging disruptive and destructive technologies (EDDT) and funded by a new form of Lend Lease with the private financial sector – Lend Lease 2. At the core of this effort will be a new financial instrument – the Defense, Security and Resilience Bank (DSRB).

For too long economic security and military security have been seen by political establishments as mutually exclusive. They are not. Rather, they are two sides of sound defense. The only way Canadians and Europeans are going to credibly return to sound defense if they are seen as capable allies in the eyes of the Americans and a capable threat in the eyes of their many adversaries. That goal will in turn require the use of all national means, most notably the entire technological and defense base and fully secured supply chain. New funding for the New Defense will be particularly important for small and medium enterprises (SME) because they are the true source of innovation and too often blocked by the cost barriers to market entry that prevent defense modernization. Rather than focus on new political strategies for defense the focus should be on new capabilities at capacity driven by industrial and financial investment.

The cost of procurement must also be markedly reduced even as the pace of procurement cycles is accelerated in pursuit of efficiency, effectiveness and affordability and the technological edge the New Defense must strive for. There is one lesson from history. In 1935, the "Shadow Scheme" was established by the British Government the aim of which was to subsidize manufacturers and construct a system of 'shadow factories' reinforced by additional capabilities at existing aircraft and

[7] Julian Lindley French, Chairman, The Alphen Group
Robbie Boyd, Senior Leader, Defence Security and Resilience Bank -DSRB Development Group Foundation

motor industrial plants that could immediately increase war production on the outbreak of war. It worked.

Lend-Lease 2 is the macro-defense-economic strategy needed because it will extend new sources of public and private financing to afford Canada and Europe in conjunction with 'good citizen' extended debt holiday and/or debt relief. In so doing Lend Lease 2, and its surrogate the DSRB, will enable investment in the extraordinarily expensive systems and platforms Canadians and Europeans need to mount sound defense. DSRB will also finance new global supply chains by blending national, private, institution and Multinational Development Bank finance together and at speed.

**Lend-Lease 2: Affording the New Defense**

*What is needed?*

In September 2024, Mario Draghi published a report into European competitiveness (or rather lack of it) that also applied to Europe's fading relative defense competitiveness, and which set out Europe's situation starkly.[8] Europe, Draghi suggested, is comprised of a set of declining powers too often arguing with each other and thus unable to see the bigger picture from which threats to Europe are emerging. It is not just Europe. Canada, North America's European country and the country that has for many years made the Alliance more than simply a US European protectorate has also been in steep defense decline and denial. A contested three-ocean state that has for too long been free-riding on the US.

There are many causes to this defense crisis, for that is what it is. Strategically illiterate Canadian and Western European leaders, the impact of the US-created banking crisis on public finances, a cultural aversion to defense, loss of faith in the Americans after twenty-five years of poor leadership, the collapse of patriotism, the lack of influence defense ministers have in government and ballooning post-COVID welfare budgets. There is also another cause often missed by the *Kommentariat*, the enormous cost barriers to beginning defense modernization. A cost that grows with each year that passes as emerging disruptive and destructive technologies (EDDT) make Canadian and European armed forces a legacy of the past as the likes of the US and China move into the digital AI-driven defense future.

The war in Ukraine has also revealed a host of hard lessons that Canadian and European armed forces need to lead: the vulnerability of armor unsupported by infantry and helicopters in the battlespace. Forces must also dominate both fires and counterfires and possess an awful lot more of all such systems across both the strategic and tactical battlespace. The growing role of robotic drones in the battlespace in all their forms must be grasped as part of a new concept of Multi or All Domain Warfare (MDO) across air, sea, land, space, cyber, information and knowledge domains. All-weather drones are just around the corner.

Enhanced and protected battlefield mobility together with increased force command resilience will be vital, given how often the Ukrainians have been able to detect and 'kill' Russian forward (and less forward) deployed headquarters. Theater military mobility will also need to be rebuilt together with infrastructure and all legal impediments removed to foster rapid cross border movements in a pre-war emergency. Military counter-mobility should also be built into such infrastructure as

[8] https://commission.europa.eu/topics/competitiveness/draghi-report_en

standard too. Deployed forces will also need much improved force protection with the need to reduce the detectability and thus digital footprint of force concentrations ('bright butterflies').

Given the scale of the challenge an obvious temptation would be for Europeans to be seduced by the prospect of some form of European Army built on Article 42.7 of the Treaty of European Union and a Common Security and Defense Policy. After all, a common defense would be by far the most efficient way of matching enormous ends, with properly coordinated ways and huge means. In practice, a common defense is unlikely to be efficient in the absence of a European Government that can provide a unitary command, or that capable because it would exclude major powers like Britain and Canada both which are vital to any meaningful future defense of what the defense of Europe requires. A common defense also goes to the very heart of the European debate over who runs Europe – the EU or the member-state? Rather, what is needed is some form of macro defense convergence criteria and the recapitalization of Euro-focused Allied defense built on the existing NATO commitment to spend 5% GDP of which at least 3.5% GDP must be dedicated to core defense expenditure.

The New Defense will also be precisely that - a new form of defense - a hybrid defense in which some elements for some states will become common even if most elements for most states will remain collective. Therefore, for some elements of the new defense Canadians must also be seen as part of both North American defense and a wider European defense effort. That is the political implication of membership of the EU's Security and Action for Europe (SAFE) and the welcome application by the Canadians to join the United Kingdom's Joint Expeditionary Force (JEF) of ten northern European and Arctic nations. Furthermore, the New Defense must also be fully inclusive. That is why Canada led in drafting the Charter for a new Defense, Security and Resilience Bank, a holistic and flexible form of deterrence financing open to all like-minded states, from the JEF nations to Japan, South Korea, Australia and New Zealand.

The core questions the article addresses are how to overcome the cost barriers to defense modernization and the changes to the Canadian and European Defense, Technological and Industrial Base (CEDTIB) that new financing will necessarily impose. The future of European defense depends on a growing degree of European strategic autonomy, but only if Europeans are willing to take on far more strategic responsibility for their own defense. The essence of deterrence financing is to provide these Presidents and Prime Ministers with built for purpose tool kit to support their decision-making off normal balance sheet cycles. Dynamic decision making to finance capabilities and resilience at pace. They need it, Russia is mobilizing…and they need to pay to deter it.

*Why now?*

The defense of Europe is in a crisis caused primarily by leaders who fail or refuse to understand what is needed to defend Europeans and deter aggressors going forward. The specific problem is a lack of digitally enabled warfighting maneuver forces and a sufficient mass of force to sustain the fight allied to a lack of capacity to move such a force quickly in and around Europe and the wider and contiguous North Atlantic theater. This has been a perennial problem for Europeans focused mainly on a host of capability shortfalls covering land, maritime, air, mobility and ISTAR (intelligence, surveillance, target acquisition and reconnaissance), CBRN (Chemical, Biological, Radiological and Nuclear) defense, air to ground surveillance, Command, Communications and Control (C3), precision guided munitions (PGM), suppression of enemy air defenses (SEAD), strategic sea and air lift, air-to-air refueling, deployable combat support and combat service support units, but above all air and missile defense and space dominance.

To be credible both as a deterrent and a defense the New Defense must be built on and around an Allied Command Operations Mobile Heavy Force (AMHF) that goes well beyond the current Allied Reaction Force (ARF). The AHMF consolidate all Allied European-based rapid response forces into one single pool of forces supported by the requisite force structure. The AMHF would act as a high-end, first responder Allied Future Force able to act from seabed to space and simultaneously across the multi-domains of air, sea, land, cyber, space, information and knowledge, as well as being able to seamlessly integrate/orchestrate and coordinate/command both military and civil capabilities. Such a force would be sufficiently robust and responsive, and held at a sufficient level of readiness, to meet all threats to the territory of the Euro-Atlantic Area in the first instance, whilst also having sufficient capacity to support those front-line nations facing transnational threats, such as terrorism.

The AMHF would need a constitution so it could operate under EU, EPC, NATO and Third Country command and designed to exploit emerging disruptive and destructive technologies whilst maintaining a high degree of interoperability with fast evolving US forces. Together with enabling combat support and combat service support, the AMHF will be deployable in several guises and under more than one flag, including as a NATO-enabled Canadian and European coalition (both EU and partners), or as a framework for coalitions of the willing and able. It must also act as a development vehicle for the introduction into the Allied Order of Battle of artificial intelligence, super/quantum computing, big data, machine-learning, drone swarming, hypersonic weapon systems to enable an Allied capability to engage in hyper-fast warfare. This capability will be crucial to deterrence in the future.

The AMHF would also help give shape and meaning to greater European strategic responsibility. Such responsibility, and the autonomy it would foster, can only be realized through relative military capability and capacity compared with an adversary.

However, to ensure the AMHF is stood up in a timely manner the European Allies, together with Canada, will by 2030 invest sufficient resources to ensure they collectively meet at least 50% of NATO's Minimum Military Requirements identified by the Strategic Commanders, including fully usable forces required for covering the whole spectrum of operations and missions, as well as the strategic enablers required to conduct multiple demanding large-scale and smaller-scale operations. Such operations will be conducted both alongside US forces in a variety of regions inside and outside SACEUR's Area of Responsibility (AOR), as well as autonomously when agreed.

NATO is and will remain Europe's principal provider of military security and defense, but it will not be alone, with the EU and EPC taking on more responsibilities. Defense Ministers will decide and direct the necessary details in their Political Guidance for Defense Planning. Such a set of contingents of fully capable forces and capabilities provided by Allies will at the same time provide a pool of forces they could draw from for autonomous crisis response missions and operations within the EU with the support of Third Countries.

*Equipping for the Future*

The EU and NATO must begin by conducting a joint shared assessment of the platforms and systems needed to prepare both Allied forces and mission critical non-military national assets to cope with a wide range of potentially debilitating future contingencies, such as attacks on critical national infrastructures, cyber-attacks, and other more exotic threats. The interface between defense planners and a wider technology community will be critical and must also be strengthened than hitherto and encourage defense industrial partners to further consider innovative applications of dual-use technologies.

British, Canadian and EU defense industries are not just part of national economic development and technological innovation they are the foundation upon which the New Defense must be built. Consequently, both the Alliance and the EU must ensure any process of adaptation is based on fair competition, reciprocal arrangements, and open to technology partners beyond the traditional defense, technological and industrial base. The key is to create a research, development and procurement system that overcomes national vested interests to ensure the integration of high technology into Allied forces that is also affordable and can be fielded rapidly.

To that end, the cost of procurement must be markedly reduced even as the pace of procurement cycles accelerated if the Allies are to balance efficiency, effectiveness and affordability. This is because it is vital the New Defense is built on a technological edge. More Allied Strategic Responsibility will also require a stronger Allied pillar (Canadians and Europeans together) of the Alliance. The European Allies must thus ensure that Europe's defense industry becomes far more innovative and competitive by being better able to sell across allied defense markets, including partners in the Pacific.

Realizing such a shift will also require significant reform to the Canadian and European Defense, Technological and Industrial Base (CEDTIB). Firstly, an urgent shared assessment is needed to consider how existing industries can be better harnessed and new [global] industrial partners and secure global supply chains successfully engaged, financed and established. Such a shared assessment will be vital to establish a reasonable and sustainable level of necessary operational capabilities. This is also because future requirements will be defined far more in terms of the minimum high-end operational capability needed than 'how much threat can we afford' finance ministry diktats. Given the nature and scope of emerging threats, understanding the interaction in battle between systems, platforms and technologies will be the sine qua non of the New Defense.

The AMHF would as the grand architectural systems integrator. The AMHF would thus need to incorporate and leverage Artificial intelligence (AI), autonomous systems (including adaptive drone swarms), big data, information and communication technologies, energy and propulsion technologies, hypersonic systems, electronic and electromagnetic technologies, space-based capabilities (including commercial capabilities) from imagery to tracking and beyond, and the future role of quantum technologies, novel materials and advanced manufacturing, and military personnel that are physically and perhaps cognitively enhanced. Allied forces will also have to counter adversarial use of these enabling technologies at both the theater-strategic and tactical battlefield levels of command and effect, and face adversaries that may not adhere to Allied ethical, legal, and moral norms. The true test will be interoperability among Allies and with the US future force and those of Partners in Europe and the Pacific when operating at the high-end of conflict and under extreme duress.

The AMHF would also help promote better and improved intelligence sharing, which has been noticeably absent in the past twenty years. This is vital, at the very least to demonstrate a shared determination to attribute grey zone warfare attacks to perpetrators as part of autonomous Allied deterrence. An Economic Security Alliance would better promote efficient investment in multi-domain monitoring capabilities by reallocating existing means and/or developing new ones to prevent threats to critical infrastructure. Such monitoring would also enable Allies to develop autonomous threat signaling irrespective of the US perspectives, thus promoting autonomous active countermeasures to convince any potential attacker to change course. Given the growing division between US and Allied threat assessments a new system of autonomous Allied analysis is needed

to impose proportionate and pan-spectrum strategic retribution, ranging from targeted economic measures (e.g., sanctions, export controls, trade measures, industrial policy) to the use of force.

Vision is one thing, delivery a whole different ball game. Severe political and other impediments remain to the generation of capabilities that can enable advanced defense expeditionary forces that will become the Allied stock in trade. Although the downward spiral in defense expenditure has been halted, neither Canadians nor Europeans spend enough to realize a minimum deterrence and defense posture given the scale of the threats that are emerging. Too many Europeans continue to retain bloated defense establishments that prevent anything like the 40% deployability of force and 8% deployed force targets agreed by the Alliance over twenty years ago. Indeed, most European forces remain, at most, around 10% deployable with around 3-4% deployed.

*Strategic public private partnerships*

To paraphrase recent comments by the new UK Prime Minister Andy Burnam, there can be no international resilience without societal resilience in a transnational cross border community of open societies. Whilst deterrence is what you know, resilience concerns what you do not. Credible defense and deterrence is not simply about capable armed forces; it also depends on credible people protection. The power projection vital to contemporary defense will not be possible without credible protection of the home base. Power projection and people protection are the two sides of any sound defense. Strengthening societal resilience, in turn, depends on strategic public private partnerships within states, between states and institutions, and increasingly with the private sector. Such partnerships are the very essence and foundation of resilience. Strategic public private partnerships are particularly important because they are in essence the spaces in which industry and technology and civil-military security and defense policy meet the industry and technology actors critical to generating redundancy and robustness.

Strategic public private partnerships will be at the very core of resilience. How can such partnership be built? There are seven pillars:

First, such partnerships will also demand a profound change of mindset on the part of policymakers.

Second, industry must be engaged early in planning and for critical national and international defense and security capabilities.

Third, new legal and procedural processes are needed to protect, leverage and mobilize populations during the transition between peace and war.

Fourth, new foresight techniques are needed to develop strategic deterrence and resilience communication plans and public messaging campaigns for future war scenarios.

Fifth, collective training and exercising must be exhaustively undertaken with allies and partners to test physical, digital and societal resilience, strengthen partnerships and better understand communication networks.

Sixth, regular exercises must be conducted by and with government and industry to test the whole of society's resilience during future war scenarios.

Seventh, minimum critical resilience requirements must be established and coordinated across the financial and economic and information and communications sectors. Financing must now be blended by leadership across multinational lending institutions, development banks, public and an

incentivized private sector – a new finance stack is needed. Deterrence Financing should be regarded as a weapon system.

*An EDDT strategy*

The credibility of any New Defense will be built on force readiness and reliant on responsiveness. Perversely, the Canadian and European defense crises also create an opportunity for the Allies because it is a chance to wipe the slate clean by procuring emerging disruptive and increasingly destructive technologies (EDDT). What is needed is strategy. Any such strategy will only be crafted if development and procurement is shifted away from finance ministries and back to chiefs of defense and security and resilience professionals. Too often political decision-makers are advised what they can afford rather than what is critically needed.

An EDDT strategy would extend across the three and necessarily reconceived NATO core tasks of deterrence and defense, crisis management, and co-operative security. Any such strategy means, in turn, means the *sine qua non* of future deterrence and defense will be the creation of a New Defense military instrument of power able to confront now the threat posed by Russia, and autonomously from the US. It will also enable Allies to assist the US by easing the pressure a rising, militarist China is imposing on US forces. Central to the argument herein is that the future epicenter of Canadian and European deterrence and defense effort will be an enormous space that stretches from the Arctic and the High North to the Azores and from eastern to southern Europe. Given the size of that space technology and robotics will be one solution amongst many in striking a new balance between mass and maneuver, quantity, and quality. However, technology alone will not offset either a lack of quality or quantity. There is no silver bullet but several.

The lessons from Russia's war on Ukraine indicate the beginning of a long journey that is already changing the character of war and thus provides the minimum entry level test for an EDDT strategy. Day one interoperability is still a very significant challenge for Allied and Partner forces and as devolved command authority becomes ever more prevalent campaign and mission success will rely on secure and seamless data-sharing at the high end of interoperability when command and force structures are under intense pressure and over time increasingly reliant on AI-driven data integrity. Allied and Partner forces thus need far greater adaptation readiness supported by enabling policies to better exploit technology. This assessment is again supported by lessons from the Russo-Ukraine War which suggests that during the next defense planning cycle (10-15 years) emerging disruptive and destructive technologies will be applied alongside existing platforms and systems, such as artillery and armor to better enable them.

Multi Domain Operations (MDO) will require integrated actions across air, sea, land, cyber and space with the critical relationship being between sensors and command and control systems reinforced by civil capabilities orchestrated alongside military forces and more often by military commanders. To that end, SHAPE must be developed as a strategic warfighting headquarters not just for NATO but also for the EU, European Political Community (EPC) and coalitions to enable true economy of force via effective, upscaled and much accelerated command and control for a complex and technologically driven family of operations. At the very least, SHAPE must remain militarily fit across all and any threats it may face which means a retained and proven capacity to analyze, advise, develop appropriate strategic approaches, plan, resource, command and control the fight, assess, and validate.

Campaigns and missions will become ever more challenging given the marked acceleration in the observation, orientation, decision, and action (OODA) loop that is being driven by EDDT. Critically,

plans must not only be updated constantly, but they must also be resourced which places a particular premium on prioritization, particularly where it concerns the use and utility of technology. For the future warrior to be effective mission command will be driven by a speed of relevance built on information and knowledge which will be as important as capabilities. It will also form an integral part of multi-domain operations with a proven capacity to act at the speed of relevance. AI enabled Open-Source Intelligence (OSINT) must be fused with sovereign-based intelligence across all domains. A seamless merger of new Civilian based AI platforms and traditional military and agency processes are the essence of multi-domain decision-making.

The lessons-learned process will be particularly important as much of the New Defense will be about exploiting EDDT in ever accelerating action-reaction cycles as hyperwar becomes a reality. Lessons will also need to be drawn from across a much broader spectrum given the scope and nature of multi-domain operations with doctrine development and professional military education particularly important to maintain force and operational cohesion and effective decision-making and agile command and control particularly in the operational domain.

*What to buy?*

The Allies must dominate their threat landscape. To that end, the 2022 Future War and Deterrence Conference Report stated that, *"By 2035, at the very latest, it is reasonable to assume that everywhere will be a battlefield and everything will be a weapon. Therefore, and at the very least, Europeans will need a high-end, first responder force that can act from seabed to space and across the domains of air, sea, land, cyber, space plus information and knowledge. A force of sufficient twenty-first century manoeuvre to be able to respond to any threat from the Arctic to the Mediterranean should the US be engaged in strength elsewhere. A force also of sufficient mass to simultaneously support front-line Allies and Partners in dealing with significant insurgencies and emergencies"* (The Conference in October 2022 was jointly organized by Wilton Park and The Alphen Group).

Forces will need to incorporate and operate artificially intelligent (AI), autonomous systems (including drone swarms), big data, information and communication technologies, energy and propulsion technologies, hypersonic systems, electronic and electromagnetic technologies, space-based capabilities (including commercial capabilities) from imagery to tracking and beyond. They will need the capacity to integrate future quantum technologies, novel materials and advanced manufacturing, and military personnel that are physically and perhaps cognitively enhanced. Forces will also need to counter adversarial use of these enabling technologies, and such adversaries may not adhere to ethical, legal, and moral norms. That may include AI supported antidotes to new biological warfare threats. However, the true test will be interoperability between Allied forces and the US future force and those of Partners the Indo-Pacific at the high-end of conflict and under extreme duress.

NATO will remain the core force planning and delivery focus for minimum defense and deterrence requirement. This was and is both implicit and explicit in the NATO Military Strategy agreed as long ago as 2019 by Chiefs of Defense (CHODs). A strategy that is comprised of two components: SACEUR's Concept for the Deterrence and Defense of the Euro-Atlantic Area (DDA) and the 10–15-year threat-based horizon scan led by SACT, the NATO Warfighting Capstone Concept (NWCC). Critically, military advice from the Military Committee at CHODs level also led to a subtle yet important philosophical change in NATO military strategy from a capability focus to a threat focus, particularly from Russia and China.

And yet, national affordability assessments remain still focused on fielding traditional deterrence and defense capabilities via traditional ways built on available resources rather than the threat. A threat-led approach was codified as early as the 2014 Wales Summit Defense Investment Pledge, which included a commitment by each ally to spend by 2% GDP on defense, from which 20% is to be invested in R&D and procurement programs – the two so-called "input" metrics. Despite repeated threat analyses by defense planners such a commitment took ten years to be realized and by no means by all Allies. The Plan also included a focus on nine so-called 'output' metrics that provide guidance on how best to ensure that the spending is made smartly and in line with NATO's agreed capability requirements, as allocated pursuant to the NATO Defense Planning Process (NDPP).[9] That effort has only been partially successful.

*Ends, ways, and means*

Two further adaptations will be necessary to close the ends, ways, and means gap between current plans, the emerging threat landscape and the threat horizon. First, the 5%/3.5% goal agreed at the 2025 NATO Hague Summit is now the minimum spending requirement. No ifs, no buts. Second, the application of increased resources must be far better tailored to exploit technologies to operationalize the NATO Military Strategy given the constantly and rapidly changing context. Third, spending plans must be far better organized to realize SACEUR's planning for the fight today and SACT's NATO Warfighting Cornerstone Concept (NWCC) for the longer-term war-fighting vision, the fight tomorrow. Fourth, all assessments of affordability must further incorporate fair burden-sharing and reasonable challenge. For example, no single ally should be expected to provide more than 50% of required capabilities in any specific domain. Role specialization is thus unavoidable.

Articles 3 and 5 of the 1949 Washington Treaty still provide the basis for matching ends, ways and means but only if they are seen as dynamic. Article 3 is in effect NATO's resilience clause, whilst Article 5 establishes the worst-case collective defense war clause for crises where resilience and defense capabilities have failed to deter armed attacks. They are also intrinsically linked because the more robust and resilient Allies become the less the prospects that an armed attack might occur. Resilience is the ability of nations to recover from strategic shocks across critical vulnerability domains and thereafter respond. Resilience is also first and foremost a national responsibility. Article 3 states, *"In order more effectively to achieve the objectives of the Treaty, the Parties, separately and jointly, by means of continuous and effective self-help and mutual aid, will maintain and develop their individual and collective capacity to resist armed attack."* Resilience and civil preparedness are thus the vital foundation for the power projection contemporary deterrence and defense demand. But, for the EU resilience should become the focus of effort. The EU has moved from competition to better cooperation with NATO. It is time for the EU to now move to a philosophy of contributing to deliver NATO deterrence, supporting its member states primarily through resilience funding; a good role for the dual-use restricted European Investment Bank (EIB). The delivery of the EU's flagship NATO cooperation resilience project, Military Mobility, has taken way too long and has not focused first on NATOs family of plans. A fundamental change is needed and quickly, EU must become a supporting institution and supporting member states resilience is where it can play its part.

Funding for resilience does not tend to come from defense budgets and is too often treated by departments of state as a device to increase budgets by claiming a host of secondary and tertiary issues as vital to 'resilience'. Unfortunately, both Canadian and European governments have defined

resilience in the widest possible way. Today, it extends from mitigation of climate change, to protecting against pandemics, to addressing large-scale refugee and asylum-seeking migrations, to countering terrorism and domestic populist extremism. The deterrence and defense focus must again become much tighter and focused on enhancing protection of critical state vulnerabilities to covert or open aggression. Critical planning and investment help prevent attacks on communications and energy nodes, critical infrastructure, continuity of government, cyber defenses, military mobility-related transportation nodes and targeting susceptibilities to disinformation and propaganda. That said, a strong case should be made by Allies that contributions to capitalize the Canadian headquartered DSRB could legitimately count towards financial resilience targets, so long as the DSRB itself promotes best practice resilience.

Critically, resilience also demands a cross-border set of solutions that can only realistically be provided by EU competences, capabilities and resources. That is why the EU should have the primary responsibility and lead in strengthening the resilience of its 27 Member States. As the 2022 Strategic Compass states: We *now need to ensure that we turn the EU's geopolitical awakening into a more permanent strategic posture. For there is so much more to do. The essence of what the EU did in reacting to Russia's invasion was to unite and use the full range of EU policies and levers as instruments of power. We showed that we are ready to pay a severe price to defend our security and that of our partners – the price of freedom. We should build on this approach in the period ahead, in Ukraine but elsewhere too".*

All of the above will depend on a new and reinvigorated NATO-EU strategic partnership based on contribution to NATO if effectiveness and affordability are to be harnessed to strengthen what is at present if very weak collective resilience. NATO does provide some "value added" through the NATO Security Investment Program (NSIP) and its projects designed to assist each ally in key domains (cyber defense, critical infrastructure protection, etc.). However, given the scope and range of threats to the 'home base' NSIP funding should be at least doubled and harmonized with EU time limited efforts under SAFE and a resilience infrastructure focused EIB. Such investment in resilience will also ensure balance between increasing defense spending consistent with the New Defense Investment Pledge.

*DSRB and Lend Lease 2*

The macroeconomics of twenty-first century defense will also require new thinking on the part of leaders who grew up in the post-Cold War era. Where will the money come from and how should it be spent? The Defense, Security and Resilience Bank must not only help Allies afford peace, it must also ensure they avoid capability monopolies that ultimately reduce fighting power, increase price and extend fielding times. DSRB empowers leaders. It provides one of the many silver bullets needed by allowing them to make - and pay for - their decisions through innovative financing that can be blended and coordinated with other multinationals, public and private investment, including participating nations commercial banks.

For too long economic security and military security have been seen by political establishments as mutually exclusive. They are not. Rebecca Harding and her colleagues at the Centre for Economic Security have been developing the concept of an Economic Security Alliance (ESA), which will be vital for scaling the defense requirements as economic and military security go hand in hand and must be de-conflicted and fast.

President Trump's *America First* policy and his threat to reduce US forces in Europe is not just a political demarche. It reflects the growing world-wide pressures on US forces caused by the military rise of China. The threats to Canadians and Europeans is thus structural not merely political and

will not abate when Trump leaves the White House in 2029. The organizational focus of the New Defense will be inter-governmental with a European Canadian Security, Defense and Resilience Alliance at its core. Mark Carney's 'Davos Speech' was written with DSRB as its core enabler. Medium powers must support. In parallel, the New Defense would enable all Allies to discuss the full range of threats which they face and the ends, ways and means of mitigating them that far better balance efficiency and efficacy. Over time it would become an Allied pillar of a restructured NATO affording the only realistic cost avenue to maintaining high-end forces at sufficient readiness to be interoperable with U.S. forces where it really matters; when forces are under intense pressure in conflict.

What is needed is an investment vehicle designed specifically to break down the cost barrier to defense modernization. The Defense, Security and Resilience Bank (DSRB) will afford Canadians and Europeans just such a vehicle. For all global democracies not just NATO, it offers a chance to break out of the defense crisis through the creation of a strategic public private partnership with the banking and financial sector. The purpose is to offer AAA backed cheap defense loans that mature over many years, a bit like the Lend Lease Act of 1941. The subsequent debt would be placed in a protected account which would be paid back when threat has passed. The motivation for the banking and financial sectors is simple – the preservation of freedom and a just peace in which to do business…and still make money. It would also be a chance for them to demonstrate 'good citizenship' given the billions of Canadian and European taxpayers' monies that was taken away from defense simply to save the entire banking and financial system in 2008 from the consequences of greed and over-reach.

Sound economics is also the basis for sound defense and the DSRB would act as the bridge between the two. Such a vision will only be realized if there is a much fuller appreciation by policymakers of the vital leveraging and influence role that economics, and in particular trade, plays in security policy. One particular aim of the DSRB would be to prevent Canadians and Europeans from economic dependency on potentially malign actors such as China, in part by financing new global secure supply chains by using the DSRB's unique ability to convene its global member states, other multinational development banks and commercial banks and investors to blend financing at speed to build new secure supply chains free of adversary control.

However, the greatest utility of DSRB will be the enabling of Canadians and Europeans to overcome the enormous cost of beginning and sustaining defense modernization and end the mortgaging of future defense simply to fund contemporary defense. This is a failing that was at its most egregious in the June 2026 UK Defense Investment Plan. Critically, DSRB would also provide an enabling mechanism for the co-investment and funding of defense and security supply chains and help through its Charter to incentivize investment by further providing an 80% 'Guarantees System' for Canadian and European public and private investment banks and pension funds to invest in defense-related supply chains, particularly defense-focused small and medium enterprises (SMEs). There are also no dual-use restrictions within the DSRB Charter that restrict development banks such as the European Investment Bank (EIB). DSRB can uniquely finance deterrence defense across the conflict spectrum from lethal capabilities for defense through to dual use security and resilience investment. DSRB will also enable the stockpiling of critical energy and other resources which will in turn strengthen deterrence as part of a Solidarity Principle that should be extended to all members of allied democracies the world over. If industry is to meet the demand of technological change and upscale production, an EDDT strategy must also include the security of vital raw materials and new productive capacities. Any such industrial strategy must be necessarily focused on the so-called defense primes within the respective defense, technology, and industrial bases. However, new

sectors of industry involving small and medium enterprises (SME) will be vital that have hitherto had little engagement with the defense sector as part of a new Defense Mittelstand, reinforced by a DSRB-enabled payment system that enables such enterprises to innovate in the way only they can.

To that end, the DSRB will promote consortia. SMEs are increasingly cooperating across Europe - and globally - to work as consortia to increase quality and accelerate fielding of equipment at much reduced prices compared to those offered by the defense Primes. This is an important new trend in affordability that is also very attractive to commercial investors seeking to make use of DSRB Guarantees, for example, or simply to overcome the many barriers that exist for such investors to enter the defense market. One example is the enabling role JP Morgan has played through the establishment of its $1.5 trillion Security and Resilience Fund.

Finally, its Charter allows for joint procurement and cooperation between participating nations Wealth Funds that are also now mobilizing to support this effort. But better still, coordinating with another often-underused silver bullet, tax-free joint procurement from NATO's well-established NATO Support and Procurement Agency (NSPA), the potential becomes even greater. Even neutral Switzerland recently joined the NSPA as a partner in preference to other European Finance Ministry driven ideas on taxable joint procurement mechanisms for stockpiling. You literally get more bangs for your bucks at NSPA.

*Affording defense modernization*

The core challenge and the focus of this article is how to break down the soaring cost barriers to beginning defense modernization. Again, the obvious answer is not defense integration but sovereignty and utility issue efficiency and effectiveness driven by a European Way of war concept. That is not going to happen because to do would demand a level of common defense that is politically impossible at present, threat or no threat.

However, there are a range of collective actions that could improve defense efficiency, such as a strategic audit of all Canadian and European defense assets and capabilities to improve targeted investment. To build a holistic, strategic civil-military vision that combines achievable means and ends built around a new conceptual framework for national, civil and military, as well as offensive and defensive security and defense efforts. Such an approach would be established on a miliary task list would in turn provide the framework for European force transformation, integration of elements of European armed forces, planning for future missions, equipment programs and defense financing requirements.

This is because Canadians and Europeans will be required to carry out a much broader range of missions than currently envisaged, over far greater distance, at potentially higher levels of conflict intensity and for longer periods. That aim, in turn, will demand far greater political consolidation focused on a Euro-Atlantic security space from Canada to the High North to Eastern and Southern Europe for which Canadians and Europeans will take on ever more responsibility. Canadian and European forces will also need to operate progressively higher up the conflict intensity scale from defense diplomacy at one end through to robust preventive missions and high-end deterrence and defense of a large multi-domain security space.

Both EU and NATO structures adapted to accommodate collective European leadership. In the EU's case that will mean affording the UK the same rights as a member-state. If interoperability and NATO standardization with US forces cannot be maintained Canadian and European forces will also need to develop a new concept of 'co-operability' with US armed forces. Such co-operability will accept that whilst equipment, training and doctrine will remain different they will be mitigated

by AI-enabled flexible command and control arrangements so that Allied forces can plug into US networks.

The New Defense strategy will be built on intense, high-end capable coalitions of the willing and able that are electronically and digitally integrated. Such a transformation will cost every cent/penny of the 3.5% GDP agreed at the NATO Hague summit…and more. Therefore, at least 10% of respective national defense budgets must be earmarked for transformation projects even if the huge uplift needed in capital defense expenditure due to years of neglect will also demand a very significant level of up-front capital re-investment. This is another mission DSRB can and will assist with. Only with the support of the private sector will Canadian and Europeans governments overcome the ever-increasing unit cost of both platforms and systems that will fight future war.

*The great financial arsenal of democracy*

The core idea herein is the need for a new version of Lend-Lease is needed whereby creditors afford Canadians and Europeans an extended debt holiday and/or debt relief. The real strength of a fighting power is its financial and economic hinterland. Why did the US enter World War Two so relatively poor and exit it so overwhelmingly rich and powerful? There is a simple answer – Britain. Between 1939 and 1941 under the so-called Cash and Carry scheme the British embarked on the greatest transfer of wealth from one state to another simply to stay in a fight with Nazi Germany. That was the price to pay for US materiel, even though Roosevelt publicly admitted keeping Britain in the war was also a critical US interest. It was only when Britain's gold reserves had been exhausted did Roosevelt suggest Lend Lease and the US became the Great Arsenal of Democracy. If one reads Roosevelt's whole December 1940 interview it is clear he had no intention of doing the British any real favors. One could even say that one of America's hidden war aims was the destruction of the British Empire. They were right. It was time as it is now time for Canadians and Europeans to stand up. What is needed is a great financial arsenal of democracy.

The Lend-Lease Act of March 11,1941 was also called, "An Act to Promote the Defense of the United States". Whilst so-called Reverse Lend-Lease from Britain and the Commonwealth to the US repaid a very significant part of the debt, by the time of 'victory' in May 1945 Britain was broken and in 1946 the US had to make a further loan simply to stop the British people starving. Debt relief? Whilst the debt was discounted it still had to be repaid. The final payment was $83.25 million on December 29th, 2006, by which time Britain had paid twice the principal in debt interest. That a price will need to be paid again for peace to someone is the reality both Canadians and Europeans must now confront. There is an alternative, but it will not be easy. The West collectively could demand an extended debt holiday which Lend Lease also provided. Or, there is the nuclear option. The West could collectively crash the global markets by defaulting on debt at the same time

In 1939-1940 Britain faced a choice – defeat or bankruptcy. Cash and Carry and Lend Lease were force majeure. Today, all Western states except for Norway are deeply in debt. The US is the most indebted of all which may explain why President Trump has embarked on armed mercantilism. British Public Sector Debt stands at £2970 billion or 96% of GDP, other European states are even more indebted, with Italian public debt at 137% of GDP. Servicing the debt annually costs almost 5% of Britain's GDP, over twice the annual amount Britain spends on defense.

Given the nature of the threats, time is also at a premium and any solution to the defense crisis will demand radical defense investment ideas. Much of the debt is held by institutions and states who benefit from peace as a public good. In Britain's case if 50% of the annual cost of servicing the national debt was transferred to defense investment Britain could immediately spend the NATO

target of 5% GDP on defense and overcome the cost barrier to market entry that is preventing defense modernization at scale.

Like Lend Lease the debt would have to be repaid but it could effectively be put into a box and only paid off over an extended period when peace prevails. This after all was the reason Britain created the first 'national debt' mechanism in 1694 and the Bank of England. The Allies would get the defenses they need without breaking the world financial system and the creditors would still get their money but only when the peace which they need to make money had been assured.

*The Shadow Scheme*

None of the above can be realized without a new partnership with defense industries on both sides of the Atlantic and further partnerships with those in other democracies, which will include commitments to contracts that are both longer and more stable than hitherto. This is because both military platforms and the systems that sit on them are about to undergo a technological revolution in which data speed will drive speed of information which in turn will dictate both the speed of command and its relevance on the battlefield. The Allies are lagging behind adversaries and are not only going to have to spend more but the Defense Technological and Industrial Base must also be transformed.

Thankfully, there is a lesson from history from which both Canadians and Europeans might draw. In 1935, the "Shadow Scheme" was established by the British Government the aim of which was to subsidize manufacturers to construct a new system of 'shadow factories'. These factories were reinforced by additional capabilities at existing aircraft and motor industrial plants that would immediately increase war production on the outbreak of war. It was this scheme that led rapidly to radar, the Hurricane and Spitfire fighters and eventually the Lancaster bomber. It also enabled Britain to surpass Nazi Germany in aircraft production in June 1940, a lead Britain never lost not least because of the entry into the skilled workforce of millions of British women.

Improved efficiency was also as important to Britain in 1940 as it is to the Alliance today. For example, the Ministry of Aircraft Production had an immediate galvanizing effect. The EU? Upon taking over Royal Air Force storage facilities, it was discovered that whilst the RAF had accepted over 1,000 aircraft from industry, only 650 had been dispatched to squadrons. Managerial and organizational changes were introduced that also had an immediate effect. Between January and March 1940 2,729 aircraft were produced by British industry, of which 638 were front-line fighters. However, between April to May 1940 aircraft production increased to 4,578 aircraft, some 1,875 of which were fighters. By June 1940, British fighter production reached 250% of German fighter production, whilst the overhauled repair service returned nearly 1,900 aircraft to action many times more than their German counterparts. Therefore, whilst German fighters available for operations over Britain during the Battle of Britain fell from 725 to 275, fighters available for RAF operations increased from 644 on July 1st, 1940, to 732 on October 1st.

Key to the success of the Plan was the Directorate of Aeronautical Production which began work in March 1936 and had two goals: rapid expansion of defense industrial production; and the dispersal of the defense industrial base to protect against air attack. By October 1937, there were five Shadow Factories already in production, whilst in July 1938 one Shadow Factory completed its first complete bomber. The Plan was also extended to industry in Australia, Canada, New Zealand, and South Africa.

The most famous of the Shadow Factories was at Castle Bromwich near Birmingham, which today is the home of Jaguar Cars. The plant opened in June 1940 and after some initial problems went on

to build 12,000 Spitfires of 22 variants! The Shadow Plan also standardized development and production. For example, the Rolls Royce Merlin engine became the powerplant for most (but not all) wartime aircraft. The Plan also looked to the future by helping to fund the development of the jet engine and the world's second operational jet fighter, the Gloster Meteor, which entered service with the RAF three months after the German Me 262.

By 1944, there were 175 dispersed Shadow Factories in operation, many of which were linked to industries not traditionally associated with defense but with relevant supply chain expertise. The most famous aircraft to come from the Plan apart from the Spitfire and Lancaster was the 'wooden wonder', the de Havilland Mosquito, a twin-engined fighter bomber that could outstrip most single-engined fighters. The RAF was not the only service to benefit. The new King George V class battleships were built from 1936 on by many workers and technicians recruited under the Shadow Plan, whilst the British Army got new tanks some of which, contrary to popular myth, were not at all bad.

*The Allied Shadow Plan*

Much of the Canadian and European defense, technological and industrial base has been left to rot since the end of the Cold War. Production facilities are few, many are obsolete and orders even fewer and only seem to come when there is a political rather than a strategic imperative. Major systems only survive from cradle to grave because industry has learnt the vital need to tie government into contracts with punitive consequences when broken, whilst much of the 'kit' ordered has more to do with industrial policy rather than defense policy.

Consequently, the unit cost of equipment Allied forces desperately need is inflated, much of it obsolete before it is even fielded and/or because innovation and technological advancement have been 'de-prioritized'. This has led to procurement disasters, Britain's Ajax armored infantry fighting vehicle being a prominent disaster, a platform that has had so many systems put on it looks more like a Christmas tree than an armoured vehicle.

The Ukraine War has demonstrated the folly of emaciating the Allied defense industrial base. NATO's Defense Production Action Plan (DPAP) is not yet a Shadow Plan and if it is not to be another of those 'wizard wheezes' announced with much NATO fanfare only to be lost in the vacuum of political irresolution it will need to be pushed through. It will also need to forge new partnerships across the entirety of a radically reconceived Allied security and defense supply chain that includes the Alliance, EU, governments, prime contractors, defense sub-contractors, systems-developers and providers who have thus far had little or nothing to do with defense.

The Shadow Plan is the great unsung hero of the British war effort between 1935 and 1945. Without the Plan Britain would have been defeated in 1940. The Alliance may not be AT war but is certainly engaged IN war. And, like Britain in 1935, it most certainly is engaged in a systemic struggle, even if many leaders are in denial whatever the rhetoric. Such struggles are not won by fine words, lofty summits, well-written communiqués or deceitful defense investment plans crafted to meet the political need of the moment. They are won by the sustained, systemic, and considered application of resources, technologies, equipment and forces over time and space.

*DSRB: Enter the dragon*

DSRB will provide the enabling mechanism for Lend-Lease 2 and act as a convening authority for an Allied Defense Market across NATO and the EU. The solution to the defense crisis does not sit in Canada or Europe, it is global in part due to the need for new secure supply chains. Allies does

not make all the component parts for their capabilities, they have limited access to Rare Earths, which increasingly sit under Chinese control. And in Ukraine, the Chinese dominate the production of the most important piece of battle winning tech for both sides, the fiber optic cables that allow drones to communicate securely with their operators. Without such a mechanism, building the platforms and systems that are needed will simply prove extraordinarily expensive and replacing them entirely within the hands of an adversary. That is why DSRB is being asked by its founding nations to act in a convening role to rapidly finance new global supply chains by blending national, private, institution and Multinational Development Bank finance together and at speed.

The selection of Canada as the G7 lead for the Banks global headquarters is geopolitically ideal. Canada sits not only across the Atlantic and Asia Pacific but is critical to the security and prosperity of Europe. This will become ever more apparent as climate change accelerates and with it the opening of shorter sea lines of communication between Asia Pacific partners across the Arctic. These sea lines of communication (SLOC) will need to be defended against both Russian and Chinese Arctic ambitions. Canadian Prime Minister Mark Carney, a global economist and banker, is surely right when he calls for all democratic Middle Powers to cooperate globally. Such cooperation will need to combine all instruments of power to effect. That is the very ethos of DSRB and its founding nations and why it is opening an operational headquarters under Prime Minister Luc Frieden – another experienced financier – in Luxembourg. Another office is being considered in Brussels for analyzing and informing the DSRB President, regional headquarters and member-states with up-to-date global deterrence and resilience financing priorities. Such priorities will be further informed by inputs from NATO, the EU defense organizations and UN peacekeeping priorities, as well as CHODs via the network of global military representatives and defense attaches that uniquely sit in the Belgium capital. This will ensure unfettered deterrence and resilience advice routinely reaches decision makers.

Whilst European ties are the means to an end for the DSRB it is global financing mechanism with global priorities for financing deterrence and resilience clearly sits initially with achieving NATO spending pledges. Canada widens and legitimizes the DSRB and offers a mechanism for delivery and prevents any U.S. accusations of European break-out from the Alliance. Specifically, DSRB mobilizes and channels capital towards the shared and agreed defense-strategic goals of its member states — in accordance with democratic principles, the rule of law and the UN Charter.

A particular focus of DSRB is financing for SMEs, the backbone of defense and security supply chains, in cooperation with national development banks and financial actors. In doing so, the DSRB strengthens industrial capacities, promotes innovation and technological cooperation, and underpins the readiness of institutions and societies against future threats. As such, the Bank treats defense and security financing as an integral component of credible deterrence and as a response to a crisis that requires a coordinated, forward-looking multilateral architecture. Membership of DSRB also offers potential to strengthen the member states' SME sector, securing dual-use supply chains and de-risking bank financing to enable the expansion of production capacity of the defense-related SME sector.

The Bank will be set up along the lines of the less bureaucratic supranational development banks, such as the EBRD or AIIB, with a similar capital structure, similar product range, and service both the public and private sectors, with a governance structure mirroring that of AIIB. Charter negotiations, attended by delegates from 20 nations ranged from Canada to Europe to Asia-Pacific nations, included the UK as an observer, were hosted by Canada and concluded in Montreal in April 2026. The Bank operates on sound banking principles, although it will not seek to maximize profits.

Rather, it provides long-tenure, low-interest financing for defense, security, and resilience, with a mandate that explicitly supports SMEs, start-ups and supply chains across the whole spectrum of capability development including lethal capabilities. The Bank's Charter was drafted to complement national or other multilateral initiatives such as EIB and SAFE.

The targeted AAA rating and the resulting 0% risk-weighting, standard for multilateral development banks (MDBs), mean that DSRB financing will operate in collaboration with national development banks and commercial banks. DSRB guarantees loans made by members state commercial banks to their defense, security and resilience SMEs will significantly reduce capital requirements for banks, enabling banks to lend at scale, profitably, and promote the sustainability of their clients. Lower-rated states will draw their membership benefits also from interest savings on loans sovereign defense procurement receives directly from DSRB. Higher-rated members realize their benefits primarily through the multilateral guarantee architecture, which channels demand specifically towards their innovation and SME base. For both groups, the decisive feature is the exclusivity of access.

When spending is structured through multilateral financial institutions, outcomes are stronger and more persistent. Multilateral development banks (MDBs) pool sovereign equity, leverage it many times over, and crowd in private finance. MDB impact assessments suggest that sustained investment programs in infrastructure and industry can support materially stronger long-term growth outcomes than conventional expenditure alone. Applied to defense as a sector within operational nations, this may suggest that relatively small sovereign contributions can support more significant GDP multiples over a 5–10-year period from spillover effects because of greater liquidity given the appropriate institutional design and expenditure composition.

The capital subscription for joining the DSRB could also be credited against the NATO defense spending pledge targets. The capital contribution of nations is GDP-weighted but capped at the level of Canada. Canada's contribution as a G7 nation is expected to be between €1 bn and €1.5 bn in paid-in capital. Member liability is also limited to paid-in capital, i.e. the cash portion of the subscribed capital which will be paid in over five instalments, plus callable capital, i.e. the uncalled portion of subscribed capital. This corresponds to the general architecture of multilateral banks such as the World Bank or the EBRD. It is important to note that callable capital of multilateral banks has never been called since Bretton Woods. Making it a very attractive proposition as capital held by the DSB day to day remains an Asset on national budget sheets.

As more democracies join the DSRB from across the world, a larger Allied Defense Market will produce opportunities, economies of scale, and reductions in current defense inflation through competition. But what is significant is that nations can make sovereign choices over the best capabilities from a larger pool of suppliers. For Europeans and Canadians, the Allied Defense Market also increases opportunities for sales across all participating global democracies. This give and take enhances the moral obligation of democracies to provide their soldiers, sailors and airmen and women with the best equipment at the right price in their role as our principal deterrers and defenders.

*Lend-Lease 2: Affording the New Defense*

Wars do not start when the shooting begins. They are decided by the deadly mathematics of money, resources and will. That is why the focus of this article has been on how to afford the New Defense

by breaking down the soaring and immense cost barriers to beginning defense modernization caused by years of neglect. A New Defense that embraces emerging disruptive and destructive technologies (EDDT).

The battlespace of the mid-2030s will see intelligent, digitized, interconnected, and distributed applications of force and resource on a scale, speed, and scope hitherto unknown. Artificial Intelligence, machine learning, synthetic biology, Nanotechnology and in time quantum computing are already changing society. Such technologies will drive military strategy as much as strategy drives technology. The Russo-Ukraine War is again proving that mass is quality. Therefore, what is needed are informed and intelligent choices to be made about the application of such technology in maintaining credible and legitimate deterrence, defense, and security.

If intelligent choices are to be made about the technologies in which to invest it is equally vital such choices are made in partnership with stakeholders responsible for the conduct of strategy. This fusion of strategy with technology via investment must weld all instruments of national power across the diplomatic, informational, military, technological and economic and will need to be comprehensive and relentless. At the military-strategic level it will need to draw together capabilities development, military strategy, future force planning, the adaptation of the defense, technological and industrial base, key leader education, professional military education and be forged within ethical and legal frameworks.

Such transformation, for that is what is needed, will be the very essence of the minimum defense modernization needed to preserve peace through credible defense and deterrence. Transformation, in turn, will also be dependent on a new and much more assured relationship between Allies and Partners (NATO, EU, EPC and others) and between government, industry, banking and finance. At the very minimum the New Defense will require multi-domain high-end deterrence and defense across air, sea, land, cyber and space and built upon the ability to detect, determine and drive proportionate actions very fast. None of that comes cheap.

For too long economic security and military security have been seen by political establishments as mutually exclusive. They are not. Rather, it is the enormous cost barriers to market entry, be it for states, large, small and medium enterprises (SME) that have conspired to prevent defense modernization when peace seemed to some to be forever assured. As the cost has grown with each passing year due to the wishful neglect of their leaders Canadian and European armed forces have become analogue legacies of the past in a digital future being carved out by the U.S. and China. The only way back is to act fast, enable decision-makers and combine all the instruments of power available to free peoples into an impenetrable shield of assured security. No more self-deceit. No more self-delusion.

## Hi tech competition and the EU's repositioning in the global context

Alessandro Aresu[10]

### The new normal of economic security and technology competition

Hi tech – new and emerging technologies – is increasingly considered an area both at the center stage of global competition and where the European Union is at disadvantage vis-à-vis the United States and China.

Concerns about Europe's global position on technology are not new. In works such as "*The American Challenge*" ("*Le défi américain*") the French journalist Jean-Jacques Servan-Schreiber expressed in 1967 the fear of getting left behind by the prowess of the United States in managerial organization and finance, while in "*Europe: A Technological Colony?*" ("*Die japanisch-amerikanische Herausforderung*") the German diplomat Konrad Seitz tackled in 1990 the challenge of Japanese industry, particularly in electronics.

However, this time several things seem different: the pace of technological change; the "new normal" of economic security competition (particularly between the United States and China) where technological chokepoints, including rare earths and artificial intelligence systems, are frequently weaponized through tools such as export controls; and, last but not least, the transformative nature of artificial intelligence as a general-purpose technology.

Since the COVID-19 pandemic, we have experienced several crises which were considered "wake-up calls" for Europe and have exposed a series of European vulnerabilities in this age of weaponization of geographical and technological chokepoints. The European Commission has presented several documents to tackle the issue of economic security, but their impact has been limited, so far, given the bottom-up approach of the proposed regulations.

Market and product "wake-up calls" have continued, particularly in the face of the current artificial intelligence super-cycle in the United States, with enduring growth in stock markets and valuations of companies within the semiconductor and AI value chain.

At the same time, it is increasingly clear that China's industrial strength and overcapacity endanger the EU's position in several traditional sectors of European strength – not only automotive, but also chemistry, automation and robotics. The impact of the so-called China Shock 2.0 (focused on high-end manufacturing) and of the likely China Shock 3.0 (focused on artificial intelligence system but also physical AI and robotics) could be even more significant than expected, in the coming years, coupled with the enduring burden of energy costs on European companies, also considering the ever-closer relationship between AI and the electric grid.

While shipbuilding, the maritime economy and civil aviation are still areas of European relative strength where the EU's position could be maintained and hopefully enhanced by technology investment, the space domain could be another area of relative decline, in light of SpaceX's dominance of the so-called space economy, but also of rapid Chinese progress. If China were to obtain and fly multiple times a reliable and cost-effective reusable rocket before Europe, this would cement European decline in such a crucial domain. On the other hand, if the recent advances made by European startups such as Germany's Isar Aerospace—which successfully launched its Spectrum

[10] Author and Essayist

rocket into orbit from Norway in September 2026—can be sustained, they could significantly strengthen the EU's overall position in the global technology landscape.

**How Europe's vulnerability is exposed**

Among a series of episodes regarding tech competition and chokepoints, the Nexperia case seems particularly useful to understand the EU's technological and industrial stance between the United States and China.

The Dutch Ministry of Economic Affairs invoked in September 2025 a 1952 statute conceived to keep essential goods moving in a national emergency, in order to suspend the governing rights of Nexperia, a chipmaker headquartered in Nijmegen and owned since 2019 by China's Wingtech Technology, after its sale by the Dutch.

To justify this move, the Dutch Ministry cited serious governance shortcomings and the risk that Nexperia's finished and semi-finished products — so-called "legacy chips", that sit inside the modules and airbag controllers of a large share of Europe's car fleet — would become unavailable in an emergency.

The decision came after a long series of negotiations with US officials, after Wingtech, Nexperia's owner, was put on a US government blacklist. Therefore, fears of both losing key intellectual property and losing access to the US market were drivers of the decision.

Beijing did not wait long to answer in kind. In October 2025, China's Ministry of Commerce imposed export controls barring Nexperia's Chinese subsidiaries and subcontractors from shipping finished components made on Chinese soil: precisely the packaging and testing stage on which the Dutch-designed chips depended to become usable products.

Therefore, the very presence of assembly factories within the People's Republic of China was a chokepoint that the Chinese government could use to force the Dutch at the negotiating table. Without Chinese factories, basically, some chips could not be produced, and parts of the EU's automotive industry did not have stockpiling to resist this threat.

A few days, later Beijing also widened its licensing regime for rare-earth exports, requiring foreign companies worldwide to obtain Chinese government approval before exporting the named elements or any product containing them.

De-escalation happened on both fronts, also because of the wider negotiation between the Trump administration and the Chinese government on tariffs, but the situation made clear Europe's vulnerabilities, in terms of both consumer reliance, given the strength of demand in the United States, and reliance on supply, given the nature of global tech supply chains.

In the next few months, given the impact of the "China Shocks", further confrontation between the EU and China seem likely. Therefore, the EU should be better prepared. To this situation, we can add a specific cognitive vulnerability: a lack of public-private sector coordination in the European Union, which limits the knowledge regarding key chokepoints vulnerabilities. Therefore, the EU remains more exposed to external shocks than the United States, China and other players within tech supply chains, for instance Asian players like South Korea, Taiwan and Japan. Their concepts of economic security are based on a constant coordination between the private and the public

sectors. This has helped to assess specific vulnerabilities, such as energy and hydrocarbon byproducts dependance during the Iran War.

The EU's predicament is underlined in detail in the report "The Future of European Competitiveness" by former ECB president and Italian prime minister Mario Draghi, published in September 2024, but also in the rather blunt statements contained in the US National Security Strategy published in 2025.

Draghi organized his diagnosis around three intertwined transformations: closing the innovation gap in advanced technologies, decarbonizing while cutting energy costs, and reducing strategic dependency in the specific sectors — semiconductors, critical raw materials, defense — where a single supplier or a single strait can be weaponized.

The Draghi report proposed specific measures to reduce red tape, simplify governance (for instance, in areas such as space), exploit the EU's procurement power as a single bloc, enhance investment.

Two years on, the inadequate implementation of the Draghi report shows that the gap between diagnosis and execution is itself a chokepoint of a different kind: an institutional one, produced not by an external adversary but by the Union's own unanimity requirements, national vetoes and fragmented fiscal capacity.

**Europe's strategy on semiconductors and how it can be improved**

Given that the European Union has comparatively lost ground to Asia, both in hardware and software, in all digital super-cycles of the last thirty years (personal computers, Internet, social media smartphone, cloud, artificial intelligence), building a so-called European "stack" will be extremely difficult and expensive. The compounding advantage of other players in cloud technologies, for instance, is significant, and this needs to be acknowledged.

In this area, programs that have not achieved practical results consistent with the goals of European competitiveness, such as Gaia-X, should be closed, and replaced by a stronger support of native European startups building digital sovereignty from below, and by the spread of best practices enacted by private European players, such as the Schwarz Group's tech division Schwarz Digits and its platforms. However, given the current fragmentation and backwardness of European actors, any policy to enhance Europe's position will need contingency plans, preferably with like-minded countries.

Any meaningful strategy for the EU's repositioning in the global technology context ultimately comes to semiconductors, a complex supply chain of several segments (including design tools, design, production, equipment, chemical, assembly and testing) which are and will remain in the recent future at the heart of any industrial, digital and defense product.

Europe's share of global chip production has fallen below 10%, and the Chips Act's 2022 target of doubling that share to 20% by 2030 is now acknowledged as unreachable, including in the Commission's own July 2024 forecast of a more modest 11.7%. The super-cycle and buildout of memory facilities will widen the gap, because that market is dominated by Korean heavyweights, Samsung and SK Hynix, followed by the US company Micron, with Chinese players like CXMT playing an increasing role.

The Chips Act 2.0, proposed in June 2026 as part of a broader Tech Sovereignty Package, quietly abandons the market share metric in favor of a more industrial way of thinking: the capacity to shape global semiconductor networks in specific niches such as power electronics, microcontrollers and photonics, and the value chain of quantum technology. Quantum technology will not be a single "chip", but rather a complex industrial system in itself, also closely connected to semiconductors, in which European companies, particularly startups, can certainly play a role, with the right support and business environment.

This seems a more honest strategy, and a more useful one: while market share does not matter so much in the EU's current position, industrial niches certainly do, particularly when they are organized in ecosystems, because it is within industrial niches that chokepoints and vulnerabilities emerge.

Europe already matters as a market for several players, but recent moves by US companies such as Apple and Anthropic, based both on their own business interests and on the pressures and demands of the US government, are bound to continue. Therefore, it is time to admit that Europe's market power, both vis-à-vis the United States and China, could remain limited. In a nutshell, Europe can be a significant market, but it can also be excluded from certain technologies or from certain products, partly because of the inability to act as a real "single" market. Moreover, China has exploited and will continue to exploit the recurring divergence of interests between Member States to play a *divide et impera* strategy, for instance through investment and joint ventures in an area where it has built a clear advantage, such as green technology.

Within this complex framework, the understanding of the EU's most well-known technological success, the Dutch company ASML, cannot be limited to the story and operations of ASML, which is itself a supply chain and now also a geopolitical player. ASML's success is also due to the Brainport Eindhoven region's ecosystem, with its public and private players, as well as its networks of collaboration with other European regions, particularly in Germany. Therefore, understanding and enhancing innovation ecosystems, also in terms of skills, is a key priority for a better positioning of the EU in the global tech competition.

Another area still missing in the area of semiconductors, apart from significant investment (which depends on political decisions on budget priorities and allocations), is a comprehensive understanding of the EU's chemical supply chain for the microelectronics industry at large: its enduring capabilities and its vulnerabilities, particularly in the face of environmental regulations, energy cost and increasing competition by China, where the chemical sector was a key part of the government's efforts to support a more self-reliant semiconductor industry.

Banking supervision could be a useful analogy for the EU's tech ambitions. The stress tests run under the European Banking Authority do not prevent individual bank failures, but they force disclosure of concentrated exposure before a crisis rather than during one.

The EU currently has no equivalent for technological chokepoints: for instance, the Nexperia intervention was improvised, using a national statute drafted for a different century, also because no standing body had mapped, in advance, which single companies, fabrication sites or ownership structures sat astride Europe's supply of any given category of components.

A Chokepoint Observatory could conduct yearly confidential geoeconomic stress tests on the most concentrated dependencies already partly identified by the Chips Act's monitoring framework and by the Critical Raw Materials Act's own supply-chain mapping, adding also the chemical and the pharma industry. It could also publish aggregate exposure levels while keeping company-specific

findings restricted to the Commission and the relevant member states, as prudential methodology already does for individual banks. The goal is not to predict every shock in advance, which is very unlikely, but to replace improvisation with a quick institutional mechanism, bringing industrial players on board.

## Beyond Trump's tariffs: Trade and defense policies looking forward

Bradely Johnston[11]

Many European observers assume Democratic opposition to President Trump's tariffs reflects a broader opposition to protectionism. That is increasingly the wrong way to think about the debate.

From Europe, it is easy to read US trade politics through the lens of the Transatlantic relationship. But many of the pressures shaping Democratic trade policy are domestic. Manufacturing, affordability, China, organized labor and the role of government in supporting American industry are all central to the debate. Europe is affected by the choices that follow from those pressures, but it is rarely at their center.

That helps explain the gap between Democratic messaging that Europe receives on President Trump's tariffs and the debate taking place within the party. The choice is not between keeping President Trump's trade agenda and returning to the pre-2016 consensus. Democrats are instead trying to define an approach of their own: one that accepts trade policy as part of a more enduring industrial policy, while placing greater emphasis on institutional oversight, clearer legal authority and more predictable use.

Some of that internal debate is already visible in the public record. Democratic lawmakers from manufacturing-heavy states have consistently argued that US trade policy should be refined and strengthened where necessary, rather than returning to the pre-Trump status quo. Before leaving office, Pennsylvania Senator Bob Casey (D-PA) urged the Biden administration to raise tariffs on Chinese steel, aluminum, and semiconductors. Representative Jared Golden (D-ME) has twice introduced legislation imposing a universal 10 percent tariff. In September 2026, 58 Democrats voted to give President Trump additional tariff authority as part of legislation intended to increase economic pressure on Russia, over the objections of Democratic leadership. These examples do not tell us where Democrats will ultimately land, but it does highlight the fractures within.

Manufacturing-heavy states such as Michigan, Wisconsin and Pennsylvania remain central to any Democratic path back to the White House. All three have historically leaned Democratic, and had Harris won them in 2024, she would have secured exactly 270 electoral votes and the presidency. That reality narrows the range of politically viable trade policies long before Congress debates the details. Democrats must ask what kind of trade policy provides them with the votes needed to retake the White House in 2028.

### Where the Democratic debate actually lies

Beyond the campaign messaging, three disagreements remain.

First is legal. The legal debate is no longer about whether tariff authorities should exist. It is about which authorities should be used, when they should be used, and how much discretion presidents should retain. That helps explain why Democrats generally view Section 232, which permits import restrictions on national security grounds, and targeted Section 301 actions addressing unfair trade practices as politically durable, particularly those targeting forced labor and structural excess capacity. Even where the Trump administration initially relied on temporary or emergency authorities such as Section 122 and the International Emergency Economic Powers Act (IEEPA), it

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has increasingly sought to transition those measures onto Section 301, reflecting a preference for a more durable statutory foundation.

Second is institutional. Alongside the debate over tariffs themselves is a debate over who should control them. For many Democrats, the priority is less reversing existing trade measures than restoring Congress's Article I role in trade policy and placing greater limits on executive tariff authority.

Third is political. Any Democratic trade agenda must satisfy organized labor, manufacturing-state Democrats, and a broader coalition that no longer shares the assumptions of the pre-2016 trade consensus. But those interests do not always align. Labor and manufacturing-state Democrats see tariffs in particular sectors as necessary to protect jobs, while other parts of the Democratic coalition are more concerned about rising prices and the broader economic costs for consumers.

## What changes if Democrats win?

Taking Congress changes leverage more than policy. The more important question is how Democrats use committee control, oversight powers, appropriations, and the ability to introduce legislation.

Even unified Democratic control of Congress would not fundamentally rewrite trade policy overnight. Reforming presidential trade authority would require presidential approval or the unlikely two-thirds majorities needed to override a veto. Winning in the midterms expands the Democrats' opportunities without removing the institutional constraints they face.

### *If Democrats control the House*

If Democrats retake only the House, they would gain their greatest influence over the process of trade policy rather than its immediate substance. Through appropriations, authorizations, oversight hearings, and committee investigations, House Democrats could introduce legislation aimed at rebalancing authority between Congress and the executive where sufficient political support exists, while requiring greater transparency around tariff decisions, and forcing negotiations with what is likely to remain a closely divided Senate. Existing tariffs would likely remain in place. The opportunity instead would be to shape how future tariffs are authorized and debated.

This distinction is consistent with the view of a former advisor to Democratic leadership that a Democratic House would be more likely to pursue targeted institutional reforms than attempt a wholesale reversal of President Trump's trade agenda.

### *If Democrats control the Senate*

If Democrats control only the Senate, their influence becomes narrower. Their principal leverage would come through confirming (or delaying) nominees such as the US Trade Representative and Commerce Department leadership while using committee oversight to scrutinize trade policy. Without the House, they could not move reform legislation. And if the administration keeps relying on acting officials, even confirmation leverage shrinks.

### *If Democrats control both chambers*

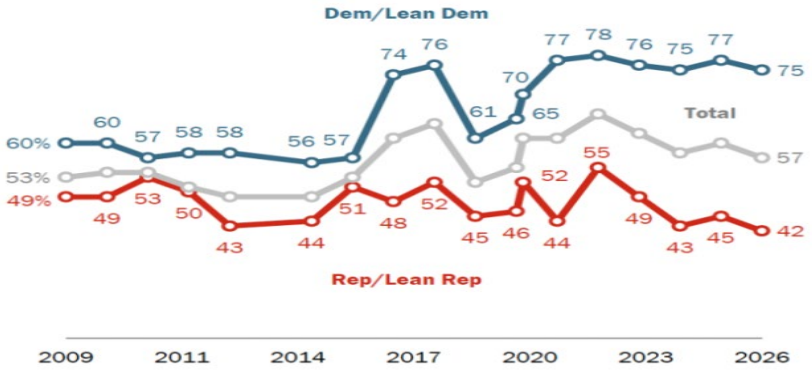
Flipping both chambers would give Democrats their strongest position on trade. The House could set the legislative agenda while the Senate could advance legislation and shape the administration through confirmations. The more realistic objective would be establishing the legislative framework that a future Democratic administration could inherit and enact rather than fundamentally reshaping trade policy during the current presidency.

**Beyond trade: The same pressures in Defense**

Unlike trade reform, the annual National Defense Authorization Act (NDAA), which sets defense policy and authorizes military programs, gives Congress a regular opportunity to shape defense priorities. Together with the annual defense appropriations bills, it gives Congress a way to shape military spending and priorities even while Trump remains in office. A Democratic House would also regain control over the Armed Services and Appropriations Committees, providing greater influence over defense spending, procurement, and industrial policies tied to national security.

As with trade, Democrats are far from united on defense policy especially when it comes to spending and the extent of US commitments abroad. In October 2022, 30 progressive Democrats called on President Biden to pursue direct negotiations with Russia, only to withdraw their letter a day later following criticism from fellow Democrats. On spending, progressives have questioned the size of the Pentagon's budget and whether some of that money would be better spent at home. New Democrats, meanwhile, have generally placed greater emphasis on military modernization, competition with China, and maintaining a strong US defense industrial base. Both have reasons to support greater European burden sharing, although for different reasons. Progressives may see an opportunity to reduce US military spending, while New Democrats may see it as a way to shift American resources toward China. Neither, however, is likely to ignore the jobs and industries that depend on US defense spending, especially in manufacturing-heavy states.

Despite these internal differences, Democratic voters seemingly remain more supportive of NATO than Republican voters. According to Pew Research Center, Democratic favorability toward NATO rose from 57% in 2016 to 75% in 2026, while Republican favorability fell from 51% to 42%. The question for Europe is how durable this partisan divide is: does it reflect a lasting commitment to the alliance, or partly a reaction to Trump's criticism of it?




*Partisan divide over NATO since 2009. % of those who have a favorable opinion of NATO. Source*: Pew Research Center. (2026). *Republicans have become less likely to say NATO membership benefits the US.*

The next two years should give Europeans a better sense of where Democrats stand on defense and NATO beyond their opposition to Trump. The 2027 NDAA and Defense appropriations process will

be useful, not just for what Democrats say about NATO and Ukraine, but for how they vote on military spending, US commitments in Europe, and defense procurement rules.

One area where these tensions may become visible is Europe's effort to expand its defense industrial base. Democrats may support greater European defense spending while opposing Buy European requirements that disadvantage American manufacturers. Buy European requirements that exclude US firms and threaten manufacturing jobs in politically competitive districts and states will be difficult for Democrats to support heading into the 2028 presidential election.

The same question applies to how Democrats approach domestic sourcing requirements in the NDAA. Will they push for Buy American provisions, or treat allied industrial capacity as part of US security, even when it competes with manufacturers in their own states and districts?

For Europe, these votes may tell us more about what to expect from a Democratic administration in 2029 than the party's current opposition to Trump's approach to NATO. Pressure from Washington for greater European burden sharing is unlikely to disappear, even if it is expressed more diplomatically.

## Reading the signals

Because few Democratic priorities will become law before a potential 2029 Democratic administration, the next two years will be more useful for understanding where the party stands than for expecting major policy changes. Track the bills Democrats introduce, but also when they introduce them. An Article I reform bill introduced early in the new Congress would suggest it is a genuine priority; one pushed further down the road may suggest leadership is trying to avoid an early division within the caucus. On defense, the NDAA and appropriations process in 2027 will provide a more immediate test if Democrats control the House. The question is not simply what Democrats propose, but which priorities they are prepared to negotiate over, and which prevail within their own party.

### Short term (Nov 2026– Mid 2027): Is Congress actually trying to reclaim authority?

Legislation to constrain future presidents (including a future Democratic administration) or reforming Sections 232 or 301 would signal a much stronger institutional commitment. Oversight matters too. Hearings focused on executive authority and statutory process, rather than tariff levels alone, suggest a broader effort to rebalance trade powers.

**Signals to watch**

*Trade*

- Committee assignments January 3rd, and spring 2027 for first budget
- Introduction of Article I reform legislation.
- Oversight hearings focused on executive trade authority rather than tariff outcomes.
- Democratic leadership advancing institutional reform beyond criticism of President Trump's tariffs.

*Defense*

- Spring 2027: the first NDAA negotiations potentially written by a Democratic controlled House. Does the top line stay near current levels or get cut?

- War-powers votes and committee oversight: do they grow into an Article I war-powers push alongside the trade one?
- How Democrats approach Buy American requirements and the treatment of allied defense production in the NDAA

### Medium term (2027-2028): What does reform get paired with?

Assuming Democrats pursue reform, attention should turn to what that reform contains. Institutional reformers may favor relatively narrow procedural changes that restore congressional authority, although the scope of those reforms will ultimately depend on what can gain support within the caucus. Labor-aligned Democrats and manufacturing-state members, by contrast, are likely to insist that any reform package also reinforce industrial policy, include Buy American provisions, or add labor protections. Whether reform remains focused on congressional authority and how much it expands to include broader protections will tell us considerably more about the direction of the party.

Representative Rosa DeLauro illustrates this dynamic. Long before President Trump reshaped the trade debate, she had established herself as one of Congress's leading critics of traditional trade liberalization. Her *Fair Trade for Working Families Resolution* (H.Res. 1286), introduced in 2026 with major labor union backing, suggests that for many Democrats, reclaiming congressional authority is only part of the project. The harder negotiation is over what kind of trade agenda that authority should support.

**Signals to watch**

*Trade*

- Trade Promotion Authority reauthorization debates.
- Whether Article I reform is paired with labor, manufacturing, or industrial policy priorities.
- Which priorities survive negotiations between leadership, labor, and manufacturing-state Democrats.

*Defense*

- Do candidates fold defense industrial policy into their campaign pitch for prioritizing and protecting Midwest manufacturing?

### Long term (2028 and beyond): Does reform become a governing mandate?

The case for strengthening Congress's role in trade policy is easier to make while Democrats are out of the White House. Whether that commitment survives once the party begins thinking seriously about governing again is less clear. If trade remains central to economic and geopolitical strategy, some Democrats may question how much authority they want to deny a future Democratic president.

**Signals to watch**

- How Democratic presidential candidates frame the use of tariffs and other trade authorities, particularly in relation to China and manufacturing.

- Whether blue-collar and manufacturing-state voters respond to that message, especially in Michigan, Wisconsin, and Pennsylvania.

- Whether candidates argue for reclaiming Congress's role over trade or preserving presidential flexibility to pursue industrial and trade policy.
- Whether the partisan gap on NATO narrows back toward its pre-Trump level

Europe has spent years asking whether Democrats will undo President Trump's trade and defense agenda. That is probably the wrong question. The more important question is what kind of agenda Democrats are ultimately prepared to pursue.

On trade, that is unlikely to mean a return to the pre-2016 consensus. On defense, stronger support for NATO will not necessarily mean fewer disagreements over spending, procurement or the interests of American manufacturers. In both cases, domestic political pressures will continue to shape Democratic policy long after Trump leaves office.