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## **Aiming at World Domination**

*The Role of Tech, The Opportunity for Europe*

July 2025

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## Executive Summary

### PART 1: Geopolitical Challenges

- Trump's return intensifies U.S.–China rivalry, framing it as a battle for global tech supremacy and governance.
- Tech companies like Palantir and SpaceX align with Washington's defense agenda, reinforcing a new cold war axis.
- Trump's early aggressive moves—tariffs, unilateral diplomacy, and military provocations—disrupted markets and global stability.
- Beijing retaliated with tariffs, rare earth restrictions, and AI/military integration under the dual circulation model.

### PART 2: Europe's Position Within Cold War 2

- Von der Leyen's second Commission incorporates Draghi and Letta's recommendations on EU governance and competitiveness.
- Draghi urges €800 billion yearly investment in productivity and tech to avoid stagnation; Letta calls for a 'Fifth Freedom' for R&D.
- Europe faces difficult choices between confronting or appeasing Trump's protectionism amid internal regulatory inefficiencies.
- Military budgets rise, defence autonomy gains traction, and Europe debates forming a rapid-response army for strategic autonomy.

### PART 3: Tech Advancements in US, China And Europe

- The U.S. leads in AI and quantum breakthroughs with massive private investment; Stargate Project sets global AI pace.
- China leverages cost-efficient AI models like DeepSeek and state-led fusion and quantum development to rival the West.
- Europe lags in foundational tech but leads in regulation; the AI Act and GDPR shape global norms but stifle growth.
- Draghi proposes EU bonds and ARPA-style funding to escape the 'middle technology trap' and energy reliance on imports.

### PART 4: Scenario Analysis and General Conclusion

- Three U.S. scenarios are outlined: tech-led growth (4%+), autocratic decline with innovation erosion, and volatile stagnation.
- A 'Tech Trump' boom could override tariff costs, while a 'Trump Trashes Democracy' path deters investment and rule of law.
- Baseline assumes continued volatility, reduced global trust, and weak U.S. leadership as allies pivot to self-reliance.
- Europe has a unique opportunity to become a global safe haven for law, research, and innovation—if it acts decisively.

## **PART 1: Geopolitical Challenges**

### **Cold War 2, Proxy Wars, Open Conflict and Lingering Global Instability**

#### **1. Cold War 2 Seen From the DC: The ascent of Trump in the US, Supported by “Big Tech”**

During Donald Trump’s second term in the White House, the geopolitical rivalry between the United States and China—often dubbed "Cold War 2"—has entered a more confrontational and ideologically charged phase. From Washington’s perspective, this is not merely a competition between two great powers but a decisive battle over the future of global governance, economic systems and technological supremacy.

Trump’s renewed leadership has emboldened a more hawkish stance toward China, reinvigorating his administration’s narrative of Beijing as an existential threat to American values and interests. Underpinning this view is a belief that China’s state-led model, typified by surveillance capitalism, export subsidies and military–civil fusion, poses a fundamental challenge to the U.S. maintaining its agriculture and manufacturing industries at home as well as its global domination in critical emerging technology industries such as semiconductors, artificial intelligence (AI) and quantum computing.

What distinguishes Trump’s second term is the surprising coalition he has forged with segments of Silicon Valley. Once at odds with Trump over immigration and regulation, major players in the tech sector—especially those focused on defense and infrastructure-adjacent innovation—have begun aligning with Washington’s anti-China agenda. Companies such as Palantir, Anduril, and SpaceX are now seen as national champions in the new cold war, working closely with the Department of Defence, the CIA’s venture arm In-Q-Tel, and DARPA on next-generation defence technologies.

The war between Russia and Ukraine has often been described as a "proxy war," with Ukraine serving as the battlefield for broader geopolitical competition between China and the West. While Russia frames its intervention as a response to NATO encroachment and the protection of Russian-speaking populations, the West largely views the conflict as an unprovoked act of aggression aimed at restoring Moscow’s lost influence on behalf of Beijing. Polls show that only 15% of Americans view China favourably,<sup>1</sup> and bipartisan consensus in Congress has enabled sweeping legislation aimed at countering Chinese influence. Tech firms are following suit, increasingly decoupling from China in supply chains, cloud services and even venture capital flows. As Cold War 2 accelerates, Washington’s strategic posture is clear: contain China’s technological ascent, fortify American innovation and win the battle for the digital century.

#### **2. President Trump 2.0’s first 5 Months in Power**

While some of Trump 2.0 Administration’s positions on major issues such as Israel / Hamas conflict and its posture toward Iran were widely expected, the first five months of President Trump 2.0 were characterised by bold moves and intense debate. On Greenland, Panama, on the Russia vs. Ukraine conflict, on the treatment of (former?) allies, the speed of implementation of (and retreat on) tariffs on 185 countries worldwide (Russia, Belarus and North Korea were exempt, Ukraine was not...) and the rapid escalation with China created significant economic uncertainty as well as market turmoil.

Discontinuity has been delivered as promised to a level no one expected. The world equilibrium as we knew it has been voluntarily broken.

What is now to be understood is whether such discontinuity will generate more benefit or harm to the US and its citizen.

### ***What has worked in the short term***

- Panama does not host any US military base since 1999. Following Mr Trump's assertion that Panama canal should be controlled by the US military, Panama is working toward defending its sovereignty. A major US investor is in the process of acquiring the main ports (in and out of) Panama canal from Hutchison (a conglomerate based in Hong Kong). The move, which is clearly aimed at reducing Chinese's influence over a critical infrastructure generated the ire of the Communist party in China. The issue may actually be settled by Panama itself taking away the concession from Hutchison making a sale impossible;
- President Trump surprised the world when he reiterated publicly that his country would like to acquire Greenland from Denmark. Following Denmark's answer that Greenland was not for sale, he insisted suggesting economic or military measures to gain control of the island despite strong opposition of Denmark and Greenland. Recent news, suggest that Denmark is open to discuss strengthening Arctic security in collaboration with the US (which may include the purchase of significant amounts of US military materials).

### ***What has not worked***

- Russia / Ukraine conflicts was not stopped in 24 hours. It is actually still ongoing with extra strength from Russia.
- Peace in the Gaza strip seems almost un-achievable and there's no end in sight. Ideally Israel would like to "finish the job" and initiate regime change in Iran with a series of attacks. But the US is opposed to this solution for the reason discussed at the point below.
- Trump has asked Putin to intervene with Iran to facilitate the deal with the Islamic Republic. This has given leverage to Putin on the Russia-Ukraine front, further complication the solution of all three open theatres. The explosion of the open conflict between Israel and Iran has exacerbated the situation.

### ***Short-term and long-term threats***

- 16.5% of US' total imports come from China. Tariffs imposed on China will most probably generate short-term inflation in the US with significant impacts on consumers;
- Capital markets reacted very negatively to the tariffs imposed on the world and in particular on China; Financial investors need stability. Excessive volatility may reduce significantly capital markets activity, which is already tangible on the high-yield market;
- Soft power: the administration's decision to cut the global aid budgets will leave a freeway to the countries (such as Russia and China), which are looking to increase their influence, especially in Africa;
- The US have traditionally respected their partners. The transactional style of the new president, the rhetorics used and U-turn change in policies will have significant impacts on the level of trust traditional allies will maintain toward the administration;
- The new US administration consistently repeats that it "does not like" Europe. Whilst this is often interpreted as an economically-motivated comment, a significant cultural shift is being implemented by dismantling DEI (Diversity, Equity and Inclusion policies), reshaping cultural institutions, like museums and national monuments. It is likely that this divide will increasingly create distance with many European countries (and with the EU) and will likely generate more alignment with countries like Russia who share conservative principles and scepticism toward liberal policies defended by most EU countries (and the latest US administration);
- There is early evidence that the US might lose its safe-haven status
  - US Government debt suffered a significant sell-off upon announcement of tariffs; Japan and UK are the two single largest holders of US-denominated government debt followed by China;
  - Such sell-off might be the result of a number of elements such as retaliation from countries like China or simply because investors worldwide start to doubt of the independence of the

Federal Reserve. Germany's decision to repatriate a portion of its gold reserves held in the US is a clear message.

A key component of this is Washington's push to shore up the US dollar as the global reserve currency through stablecoins. We do not believe this move is likely to compensate for the loss in credibility of the US dollar, even if it will help slowing down the ongoing process of de-dollarisation.

### **3. Cold War 2: Beijing's Perspective on U.S.–China Confrontation in the Trump 2.0 Era**

From Beijing's vantage point, the re-election of Donald Trump marks the deepening of a long-anticipated ideological and economic confrontation with the United States—a "Cold War 2" that is no longer merely rhetorical, but strategic and structural. Chinese policymakers see Washington's increasingly aggressive posture as a calculated attempt to contain China's rise, weaponize interdependence, and decouple the world's two largest economies in a manner reminiscent of past imperial struggles for global influence.

President Trump has intensified the trade tensions initiated during his first term, reigniting a fierce economic rivalry with China. In his first days of the new term, the administration imposed a sweeping 10% tariff on all Chinese imports beginning February 4, 2025, citing national security concerns and the need to reduce the U.S. trade deficit. This tariff rate was subsequently raised to 20% on March 4, 2025, and further increased to 145% on April 11<sup>th</sup>, before being de-escalated to 30% following the Geneva accords of 12 May. The affected imports span a wide range of industries—from machinery to textiles and consumer goods—impacting approximately \$450 billion worth of Chinese exports to the United States annually.<sup>2</sup>

The Chinese Ministry of Commerce responded sharply, labelling the measures as "economic bullying" and vowing to take "all necessary countermeasures. Economists have warned that the broad-based tariffs could drive up consumer prices in the U.S., stoking inflation at a time when the Federal Reserve is already struggling to manage interest rate pressures. According to a 2024 study by the Peterson Institute for International Economics, previous rounds of tariffs during Trump's first term led to a 2.5% increase in consumer prices and reduced U.S. GDP by an estimated 0.5% annually.<sup>3</sup>

In retaliation, the Chinese government has introduced a series of countermeasures aimed at key American economic interests. These include new tariffs of 125% on over \$120 billion of U.S. exports, with a focus on politically sensitive sectors such as soybeans, corn, pork, and liquefied natural gas—industries heavily concentrated in swing states. In addition, Beijing has announced tighter regulatory scrutiny and data security reviews for American technology companies operating in China, including Apple, Tesla, and Intel.

The Ministry of Commerce has also implemented restrictions on the export of critical rare earth minerals, which are vital for the production of semiconductors, electric vehicles and defence equipment. The evolving trade war is already causing ripples across global supply chains, prompting companies to accelerate diversification strategies away from China and toward Southeast Asia and Mexico. Analysts at Goldman Sachs warn that a prolonged U.S.-China trade conflict could shave 0.5% off global GDP growth in 2025. As the tit-for-tat measures continue, the economic relationship between the world's two largest economies appears increasingly fraught, with significant long-term implications for global trade, investment, and geopolitical stability.

The renewed U.S.-China trade hostilities have sent shockwaves through global stock markets, triggering a selloff amid rising investor anxiety. In the weeks following the tariff escalation, the VIX index (measuring market volatility, also called the "fear index") tripled on 9<sup>th</sup> April, S&P 500 fell by 4.8%, its sharpest monthly decline since September 2022. Tech-heavy indices like the Nasdaq experienced even steeper drops, as companies with significant exposure to Chinese manufacturing and consumer markets—such as Apple, Nvidia, and Qualcomm—faced downgrades from analysts concerned about disrupted supply chains and declining Chinese demand.

Beijing perceives these tariffs not just as trade protectionism, but as part of a broader American strategy to stifle China's high-tech development and broader economic growth. Since the U.S. began targeting Huawei, ZTE, and other tech giants with sanctions and export controls, China has accelerated its push for technological self-reliance

under its “dual circulation” strategy. The *Made in China 2025* plan—once a quiet ambition—has now become a national security imperative. In 2024, China invested over ¥2.2 trillion (approximately \$300 billion) in its domestic semiconductor industry, including subsidies to SMIC, YMTC and other strategic players.

Beijing is particularly concerned about Washington’s success in pressuring allies to restrict the sale of advanced chips and manufacturing equipment to Chinese firms. The Netherlands’ ASML, Japan’s Nikon and U.S. chip designers like NVIDIA and AMD have all been pulled into the American orbit. Chinese officials argue this is a blatant abuse of market power to suppress competition, rather than a principled defence of “national security.”

Trump’s blunt rhetoric and transactional diplomacy have only sharpened the Chinese leadership’s sense that the U.S. no longer adheres to rules-based international norms, but rather uses its dominance to maintain a unipolar world. Beijing is responding by strengthening its global south alliances through BRICS+, increasing yuan-settled trade, and accelerating the rollout of the Digital Silk Road, including 5G infrastructure, BeiDou satellite navigation, and cross-border e-payment platforms like UnionPay and the e-CNY.

Domestically, the Chinese Communist Party is rallying nationalist sentiment around what it portrays as an unjust American campaign to “block China’s peaceful development.” State media regularly contrasts U.S. chaos—rising debt, political polarization, gun violence—with the stability and “scientific governance” of the Chinese system. At the March 2025 National People’s Congress, President Xi Jinping vowed to “fight back firmly against external coercion” and reaffirmed the centrality of technological self-sufficiency to national survival.

In Beijing’s eyes, Cold War 2 is not a contest China sought, but one it is now prepared to endure. With Trump’s re-election, the rivalry has entered a new phase—more open, more dangerous and potentially irreversible.

## PART 2: Europe's Position Within Cold War 2

### 1. The New EU Commission and Its Mandate

Ursula von der Leyen's rise to the presidency of the European Commission in 2019 was itself a product of institutional compromise. Lacking the backing typically afforded to a *Spitzenkandidat*, her narrow confirmation (383 votes, just above the 374 majority threshold) exposed deep fractures within the European Parliament and underscored scepticism toward European Council dominance in the selection process.

Although the EPP won the most seats in the 2019 European elections, its lead candidate, Manfred Weber, lacked backing from the European Council. As a compromise, then German Defence Minister Ursula von der Leyen—also from the EPP—was nominated and narrowly approved by the European Parliament (383 votes to 374), reflecting divisions within both Parliament and the EPP itself. These tensions resurfaced during the appointment of commissioners, with three nominees—Sylvie Goulard (FR, Renew), László Trócsányi (HU, EPP), and Rovana Plumb (RO, S&D)—rejected by MEPs. The episode highlighted Parliament's increasing scrutiny over transparency and ethics across the political spectrum.

Throughout her first mandate, von der Leyen weathered multiple systemic crises—from the COVID-19 pandemic and climate legislation to Russia's invasion of Ukraine and digital regulation. In doing so, she gradually consolidated her position and elevated the Commission's visibility in EU governance, often stepping in where national leadership faltered. This shift has been particularly pronounced as the traditional powerhouses—France and Germany—have struggled with weakened governments and diminished political bandwidth.

Her second Commission, approved in late 2024, reflects both her growing political capital and Europe's rightward drift. Backed by a more cohesive but clearly right-leaning coalition—370 votes in favour, 282 against—her new Commission features a majority of EPP figures (14 out of 27 posts) and includes members from the European Conservatives and Reformists (ECR), signalling an ideological recalibration.

This new configuration shows not only von der Leyen's increased control over the Commission's composition but also her strategic co-optation of core ideas from the Draghi and Letta reports. These documents, which advocate for deeper integration and stronger EU-level governance, now form the de facto backbone of her policy agenda—underscoring her ambition to pivot from crisis manager to architect of Europe's long-term strategic revival.

Mario Draghi's landmark 400-page report on EU competitiveness—commissioned by President Ursula von der Leyen—has already begun to shape the policy direction of the new European Commission. Its core ideas have been reflected in the mission letters sent to Commissioners-designate, signalling that its recommendations will influence the Commission's future policy streams. Alongside Enrico Letta's earlier and equally significant report on the future of the Single Market, Draghi's work has helped define the programmatic priorities and institutional architecture of the incoming College of Commissioners. This new configuration not only reflects von der Leyen's growing control over the Commission's composition, but also her strategic co-optation of key ideas from both reports, which advocate for deeper integration and stronger EU-level governance. Together with her Political Guidelines, these documents now form the de facto backbone of her agenda—marking a shift from crisis management toward a long-term vision for Europe's strategic renewal.

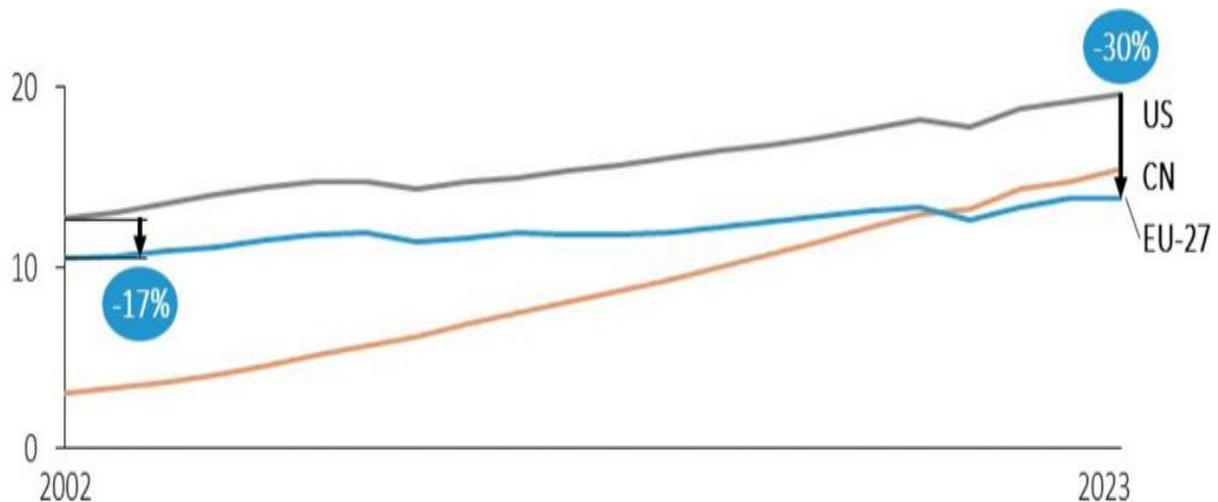
### 2. The Draghi and Letta Reports and Common EU Public Goods and Single Markets

In 2024, two significant reports reshaped discussions on European Union reforms and its role in the global economy. The first, by former European Central Bank President and Italian Prime Minister Mario Draghi, examined the challenges to European competitiveness. Released in September, it outlined strategies to strengthen the EU's industry and business within the single market. Earlier, in April, former Italian Prime Minister Enrico Letta published a report on the future of the single market, offering a roadmap for navigating the EU's evolving political and institutional landscape while enhancing its resilience and global relevance.

### The Draghi Report on EU Competitiveness

The Draghi Report on EU Competitiveness delivers a stark warning: Europe is at a pivotal moment, facing the risk of economic stagnation and losing ground to both the United States and China (Figure 1). The report argues that unless the European Union takes immediate and decisive action, it will continue falling behind in productivity, innovation, and industrial strength. Draghi outlines a vision for reversing this decline, emphasizing that Europe must rethink how it defines competitiveness. For too long, European policymakers have focused on traditional metrics such as market share and labour costs. Meanwhile, global competitors, particularly the U.S., have surged ahead by prioritizing advanced skills, technological innovation, and economic resilience. Draghi asserts that Europe must shift its focus toward these factors if it wants to regain its position as a global economic leader.

Figure 1: GDP at Constant Prices and the Gap Between the EU, the US and China

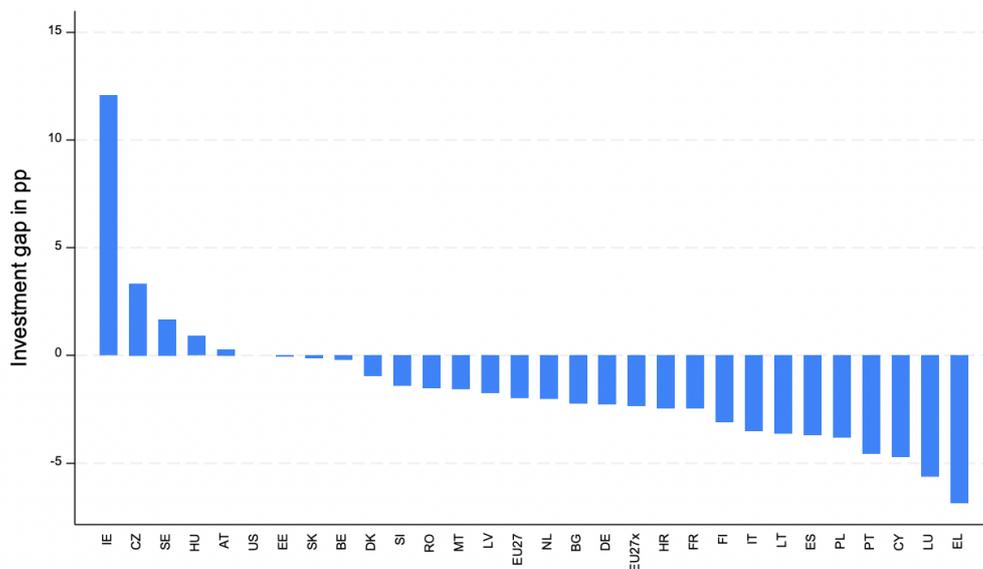


Source: *The Future of European Competitiveness*. Note: GDP at Constant Prices (2015 reference levels, in EUR trillion).

At the heart of his analysis is a troubling reality: Europe's productivity gap with the U.S. has widened significantly in recent decades. Since 2000, real disposable income per capita in the U.S. has grown nearly twice as fast as in the EU, highlighting the urgent need for a new economic strategy. Draghi points out that around 70 percent of the EU's GDP per capita gap with the U.S. is directly tied to lower productivity levels, which in turn stifles income growth and weakens domestic demand. The issue is further exacerbated by demographic changes that will make traditional economic growth models unsustainable. By 2040, the EU's working-age population is expected to decline by nearly two million people per year, meaning that future growth cannot rely on demographic expansion. Instead, productivity will need to become the primary driver of economic progress. However, the report highlights a concerning trend: total factor productivity (TFP) growth in the Eurozone has stagnated, with technological progress declining from 2.5 percent in the pre-1980 era to mostly negative levels following the 2008 financial crisis.

Another major challenge facing Europe is chronic underinvestment in strategic industries (Figure 2). Although the EU's overall investment-to-GDP ratio appears comparable to that of the United States, this figure is misleading. A significant portion of European investment remains concentrated in traditional sectors, while the U.S. and China have aggressively funnelled resources into high-tech industries such as artificial intelligence, quantum computing, and clean energy. Between 2012 and 2020, the EU's investment rate consistently lagged behind that of the U.S. by two to three percentage points, revealing a clear and persistent gap. Germany, France, Italy, and Spain, among other major European economies, have all fallen behind the U.S. in productive investment, further contributing to Europe's economic divergence from its global competitors.

**Figure 2: Investment Gap in productive investment**



Source: [Eurostat NA, EU KLEMS; EIB](#). Note: Chain-linked volumes 2015), average 2013-2019, percentage points

Draghi contrasts Europe’s approach with the aggressive industrial strategies pursued by the U.S. and China. Washington has implemented ambitious initiatives like the Inflation Reduction Act and the CHIPS Act, providing billions in subsidies for clean energy and semiconductor production. Meanwhile, China’s “Made in China 2025” strategy has solidified its dominance in key manufacturing and technological sectors, securing nearly 30 percent of global manufacturing output. In contrast, the EU has failed to adopt a comparable industrial policy, leaving it less equipped to compete in critical sectors such as semiconductors, artificial intelligence, and renewable energy. Without a fundamental shift in strategy, Draghi warns, Europe will continue to struggle to keep pace in the rapidly evolving global economy.

To counteract these trends, Draghi presents a bold vision for revitalizing European competitiveness. He argues that the EU must mobilize between 750 and 800 billion euros annually—roughly 4 to 5 percent of GDP—to invest in productive sectors. However, funding such an ambitious plan remains a contentious issue. Historically, around 80 percent of Europe’s investment has come from the private sector, with only 20 percent coming from public funds. Draghi acknowledges that increased public sector involvement is now necessary but notes that resistance from fiscally conservative nations like Germany and the Netherlands complicates the picture.

Many policymakers remain hesitant to embrace joint borrowing mechanisms, fearing that such policies would place an undue financial burden on their economies. Additionally, there is concern that increasing public investment could crowd out private sector activity, ultimately making Europe’s economic landscape less efficient. Draghi suggests that one solution could be a restructuring of EU spending priorities, shifting resources away from traditional subsidies in areas such as agriculture and regional development and directing them toward high-tech investments. However, such a shift would likely be met with political resistance from agricultural groups and Eastern European member states that have historically relied on these subsidies.

**Letta Report: the Future of the Single Market**

While Draghi’s report focuses on competitiveness, Enrico Letta’s analysis of the EU single market, published in April 2024, addresses the structural inefficiencies that hinder economic growth. Letta argues that the EU must introduce a “Fifth Freedom” centred on research, innovation, and education to strengthen Europe’s position in the global economy. His report also calls for deeper financial integration, including the creation of a European savings and investment union, as well as a more harmonized regulatory framework to make cross-border trade

and investment more efficient. Without these structural changes, Letta warns, the EU risks further divergence between its member states, making collective economic progress difficult.

Both Draghi and Letta's findings paint a sobering picture: Europe is at a crossroads. If the EU fails to modernize its economic strategy, it will become increasingly dependent on external actors for technological and industrial leadership. China and the U.S. continue to expand their dominance, while Europe risks being caught in what Draghi calls the "middle-technology trap," where industries remain competitive but fail to lead in groundbreaking innovation. The urgency of the situation cannot be overstated. If European leaders hesitate, the continent's economic future will be shaped not by decisions made in Brussels but by policies crafted in Washington and Beijing. The time for bold action is now.

### 3. EU's Likely Response To Trump Challenges: Defiance or Submission?

The EU's response to U.S. trade aggression remains complex. Unlike the U.S., which can impose tariffs unilaterally, the EU's trade response requires consensus among member states, often leading to delayed countermeasures. The EU Anti-Coercion Instrument (ACI) was designed to provide a unified response, but its eight-week implementation timeline limits its effectiveness.

To counter U.S. tariffs, Brussels has explored multiple strategies:

- **Retaliatory Tariffs:** The EU could impose levies on key U.S. exports, including soybeans and pharmaceuticals, mirroring its 2018 response.
- **Strategic Trade Shifts:** Increasing liquefied natural gas (LNG) purchases from the U.S. and boosting defence spending could serve as bargaining chips, similar to previous EU-U.S. trade deals.
- **Trade Diversification:** Seeking alternative Asian and Latin American markets to reduce dependence on the U.S.

At the same time, internal trade barriers within the EU remain a major obstacle to economic resilience. The Draghi Report highlights how EU regulatory inefficiencies function as a de facto 45% tariff on manufacturing and a 110% tariff on services, making European industries less competitive both internally and externally.

The EU could also decide to accept direct confrontation. As shown by previous crises, the EU needs external threats to take action and this might be the right opportunity to solve (at least some) its internal issues. This will of course require the continent to be compact at times where the US is working actively toward generating disagreements by offering special treatments to some EU members. While direct confrontation might appear costly (and challenging for public opinions) in the short term especially for those EU members strongly exposed to the US economy, it might be an interesting strategy as the US will, eventually need allies.

#### *The Path Forward: Europe's Trade Autonomy Challenge*

Europe's historically high trade openness, once considered a strength, is now seen as a vulnerability. The EU trades more with external partners than within its own borders, reflecting the failure of its internal market to function effectively. Addressing these challenges will require:

- Reducing internal trade barriers to strengthen the single market.
- Enhancing industrial policy to counter the effects of U.S. and Chinese state subsidies.
- Negotiating transatlantic trade agreements to prevent escalating trade disputes.

The fragmentation of the global economy, fuelled by U.S.-China tensions, European regulatory failures, and shifting trade alliances, places the EU in a precarious position. Without decisive reforms, Europe risks becoming a passive player in a world increasingly dominated by economic nationalism.

#### **4. Examples on Tariffs, Military Expenses, War in Ukraine, Monetary and Fiscal Policy, and Industrial Policies**

##### ***Tariffs and Trade Policy in a Fragmented Global Economy***

The global trade landscape is increasingly defined by tariff disputes, protectionist policies, and strategic decoupling. The resurgence of "America First" trade policies under Donald Trump, the EU's struggle to balance trade openness with strategic autonomy, and the escalating economic rivalry between the U.S. and China are reshaping international commerce. The EU, long an advocate for free trade, now faces growing challenges in navigating between competing economic blocs while addressing its own internal market inefficiencies.

##### ***Military Spending and Shift in European Security Priorities***

The geopolitical landscape of Europe has undergone a profound transformation in recent years, necessitating a strategic reassessment of military expenditures and defence priorities. The war in Ukraine, shifting U.S. commitments, and the growing perception of security threats from Russia have collectively forced European nations to increase defence budgets and reconsider their reliance on NATO. Recent discussions around a greater European defence autonomy and massive increases in military spending illustrate the bloc's urgent need to adapt to a more unstable international environment.

One of the most striking responses to recent security challenges has been the dramatic increase in European military spending. The European Union has outlined €800 billion in defence funding options following the United States' decision to reduce military aid to Ukraine<sup>4</sup>. This push reflects the realization that Europe must take greater responsibility for its own security, rather than depending on the transatlantic alliance indefinitely.

Several European countries, including Germany, Poland, and France, have significantly raised their defence budgets in response to Russian aggression and uncertainty about the U.S. commitment to European security. In 2024, Germany's military budget reached €80 billion, marking a significant increase after years of underfunding the Bundeswehr<sup>5</sup>. Similarly, Poland has committed over 4% of its GDP to military spending, positioning itself as one of NATO's strongest European members in terms of defence investment.

Yet, Europe's spending increases are not just about raising budgets but about reshaping its security architecture. The European Commission has suggested a joint procurement strategy to avoid duplication of efforts and improve cost efficiency. Collective European-scale procurement has been proposed as a means to drive down costs while increasing efficiency, particularly in sectors such as munitions, drones, and missile defence.

##### ***The Debate Over a European Army***

The increasing militarization of the EU has reignited discussions around the feasibility of a European army. Historically, the idea of a common European defence force has faced strong opposition, both within the continent and from the United States. However, as U.S. foreign policy pivots towards Asia and as European nations recognize the limitations of NATO in responding to crises independently, the concept has regained traction.

One of the major hurdles to an integrated European military force is the fragmentation of existing national armies. European defence is currently divided among 27 national militaries, each with different systems, command structures, and procurement strategies. This inefficiency weakens the EU's collective security, as it creates coordination challenges in times of crisis<sup>6</sup>.

A proposed solution is to establish a joint European rapid reaction force, modelled after NATO's structures, but operating independently of U.S. command. Such a force could provide the EU with greater strategic autonomy and allow for quicker deployments in response to crises. Some policymakers advocate for creating a standing force of 60,000 troops under EU command, while others propose integrating existing national forces into a hybrid structure.

### Europe's Position in Great Power Rivalry

European leaders are also facing the reality that military strength plays a critical role in global politics. Analysts such as John Mearsheimer argue that Europe must bolster its hard power capabilities to remain relevant in a world increasingly dominated by U.S.-China competition. The concern is that without stronger military forces, the EU risks being sidelined in future geopolitical conflicts, particularly as the U.S. pivots to the Indo-Pacific.

Despite the EU's economic strength, its geopolitical weight is diminished by the lack of a unified defence strategy. While EU member states collectively spend more on defence than Russia, their fragmented approach results in inefficiencies and lack of strategic direction. The European military budget stands at approximately \$186 billion, compared to Russia's \$65 billion, but this spending is spread across multiple countries with different priorities and capabilities.

### Germany's Defence Spending Surge and Europe's New Security Reality

Germany is set to inject hundreds of billions of euros into defence and infrastructure, marking a dramatic policy shift that overturns strict borrowing limits. Chancellor-in-waiting Friedrich Merz announced a €500 billion fund for critical infrastructure projects, alongside a constitutional amendment to exempt defence spending from fiscal constraints<sup>7</sup>.

This move comes amid growing concerns over European security as Donald Trump suspends all U.S. military aid to Ukraine, shifting the financial burden to Kyiv's European allies. Merz emphasized that Europe must mobilize trillions in additional defence funds to compensate for America's retreat from regional security commitments.

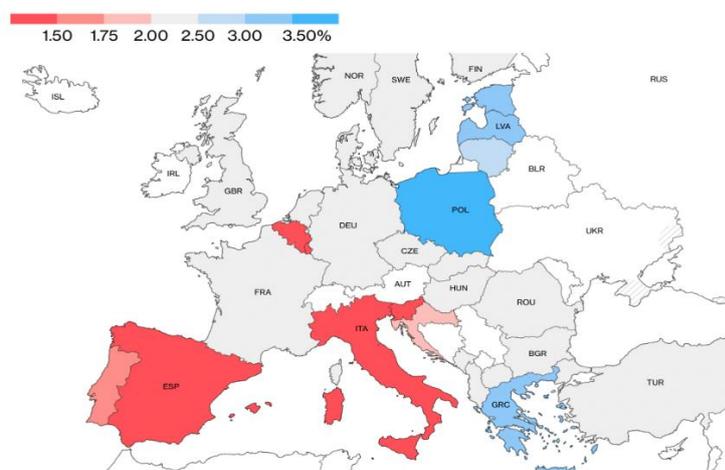
The policy shift has already impacted markets, with the euro rising to its highest level since December and German bond futures hitting their lowest point since January. The urgency behind the plan reflects Germany's economic stagnation and the broader geopolitical shifts reshaping transatlantic alliances.

Merz is fast-tracking negotiations with the Social Democrats to finalize a defence deal before an upcoming EU leaders' summit in Brussels. As Germany reassesses its role in global security, Merz stated, "Europe needs to grow up and be able to defend itself."

### Challenges in Defence Coordination

One of the biggest obstacles to Europe's military ambitions is the lack of a unified command and control structure. NATO has traditionally relied on U.S. leadership, meaning European forces are not accustomed to operating autonomously. European nations must develop better coordination mechanisms to integrate their defence capabilities effectively (Figure 3).

**Figure 3: Defence Expenditures as a Share of GDP, 2024 estimates**



Source: [Bloomberg](#)

Furthermore, there is concern over whether European defence industries can scale up production rapidly enough to meet new security demands. The war in Ukraine has revealed significant gaps in Europe’s military-industrial capacity, particularly in the production of artillery shells, tanks, and drones. The European Commission has pushed for a more coordinated procurement strategy, emphasizing that joint investment in critical technologies will be essential for sustaining Europe’s defence autonomy.

### Conclusion

The shift in European security priorities reflects the urgent need for a more cohesive and self-sufficient defence strategy. While increased military spending demonstrate progress, significant challenges remain, particularly in terms of coordination, procurement, and integration of national militaries. The war in Ukraine and shifting U.S. commitments have underscored the necessity for Europe to take a more active role in its own defence. Whether this results in a truly autonomous European military force remains uncertain, but the trend toward greater defence integration and strategic independence is now irreversible.

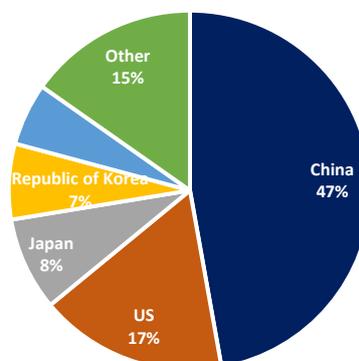
### Industrial Policies

The EU’s economic model has been deeply shaken by geopolitical shifts—Russia’s invasion of Ukraine, the U.S.-China rivalry, and the resurgence of protectionist policies in Washington. The realization that Europe lags behind its competitors in critical industries has triggered a long-overdue conversation about industrial policy. At the heart of this debate lies the Draghi Report<sup>8</sup>, which offers a sobering assessment of Europe’s economic vulnerabilities and a blueprint for revitalizing its industrial base<sup>9</sup>.

In the past, industrial policy was often seen as a relic of state-led economies, something that Europe—deeply committed to free markets—viewed with scepticism. But today, the landscape has changed. The United States has embraced massive state subsidies through the Inflation Reduction Act, while China continues to dominate key industries through state-backed investment in semiconductors, electric vehicles, and artificial intelligence. The EU now finds itself at a crossroads, torn between the need for strategic autonomy and its long-standing aversion to direct state intervention in industry.

The EU has significantly fallen behind in innovation, not only compared to the US and China but also to other global economies. In 2000, the Euro Area accounted for 27% of global patent applications, ranking second after the US. By 2021, it had dropped to fourth place with just 15.2%, overtaken by Japan, Korea, and especially China, which saw a 21.7 percentage point surge. In 2023, China dominates the global patent applications, accounting for 47% of the total, followed by the US at 17% (Figure 4). While Europe retains strong research centres, patenting capability reflects a firm’s competitiveness in global markets. The decline in innovation output signals a future where European firms and products risk losing relevance on the global stage.

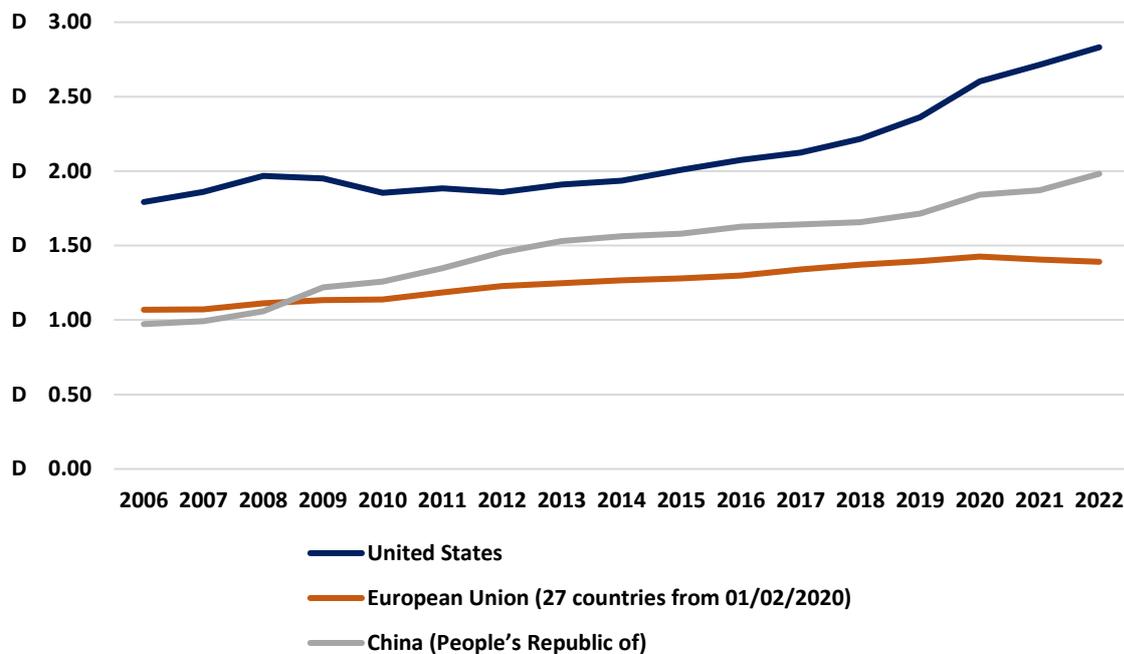
**Figure 4: World Patent Applications in 2023**



Source: WIPO Statistics Database; Notes: EPO is the European Patent Office

Focusing solely on total patent applications gives an incomplete view of the Eurozone’s innovation capacity. Two critical aspects also warrant attention: business R&D expenditure (BERD) and the sectors where Europe concentrates its innovation. First, the Eurozone underperforms in BERD relative to its economic size. While BERD has risen from 1.36% of GDP in 2006 to 1.4% in 2022 (268.82 billion US dollars, PPP converted, constant prices (2015)), this growth is modest compared to China, where BERD soared from under \$80 billion to \$532 billion over the same period (Figure 5).

**Figure 5: Business Enterprise Expenditure on R&D (BERD), as percentage of GDP**



Source: OECD MIST

The Draghi Report warns that Europe is falling behind in technological innovation, energy resilience, and defence production. Unlike the United States, which has developed a unified financial system to direct capital into high-tech sectors, Europe lacks an integrated capital market, making it difficult to finance large-scale industrial projects. Fragmented regulatory policies across member states further complicate efforts to create pan-European industrial champions, leaving European firms struggling to compete with their American and Chinese counterparts.

This investment gap has become glaringly obvious in the high-tech sector (Figure 6). Europe’s semiconductor industry remains critically underdeveloped, epitomized by Northvolt failure, forcing the EU to rely on imports from Taiwan and the U.S. for advanced chips. While the European Chips Act aims to boost semiconductor manufacturing within the bloc, it remains underfunded compared to America’s CHIPS and Science Act, which has injected \$52 billion into the industry. Draghi’s assessment is blunt: if Europe does not act swiftly, it risks permanent technological inferiority.

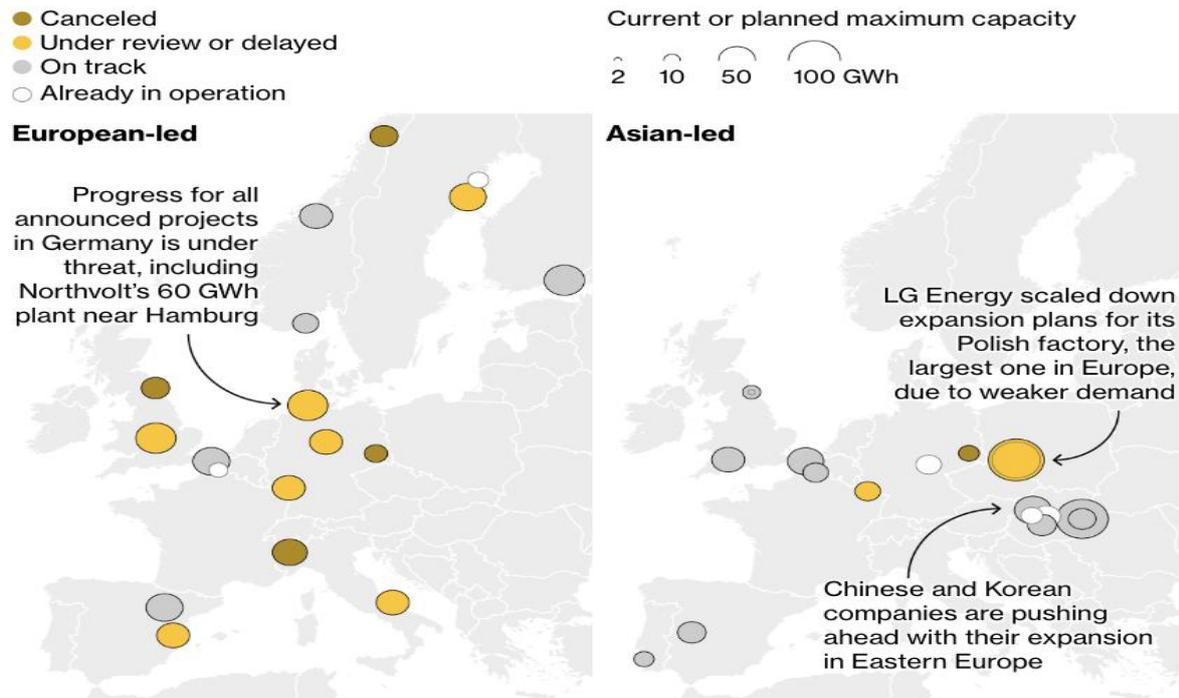
### 5. Can the EU Remain Competitive Only on Reg-Tech?

In the global tech race, Europe has long struggled to match the innovation firepower of the United States and the scale of China. Yet, there is one front on which the European Union is not only holding its ground but arguably leading: regulation technology, or “reg-tech.” With landmark initiatives like GDPR, MiCAR, DORA, and the AI Act, the EU is carving out a unique position as the world’s regulatory superpower. But is this enough to remain globally competitive?

### What Is Reg-Tech, and Why Does It Matter?

Reg-tech refers to the use of technology to help companies comply with regulations efficiently and effectively. But more broadly, in the EU context, it also refers to the creation of advanced, often globally influential regulatory frameworks for emerging technologies. These frameworks can set the tone for global compliance, data protection, cybersecurity, digital finance, and AI ethics. By creating well-structured rules early, the EU sets itself up as a rule-maker rather than a rule-taker — an increasingly valuable position in the digital age.

Figure 6: EV Battery Projects in Europe and Asia



Source: [Bloomberg](#)

### The EU's Reg-Tech Arsenal

Europe's record in regulatory leadership is impressive. The **General Data Protection Regulation (GDPR)** established the world's most robust data privacy rules, now mimicked or referenced in jurisdictions from Brazil to California. **MiCAR** (Markets in Crypto Assets Regulation) is the first comprehensive framework governing digital assets, providing legal certainty in a still-fluid sector. **DORA** (Digital Operational Resilience Act) ensures financial services firms meet stringent cybersecurity and operational standards. Most recently, the **AI Act** is the first serious attempt to regulate artificial intelligence based on risk tiers, addressing ethical, social, and economic implications of AI deployment.<sup>10</sup>

These initiatives are not just legislative achievements. They are setting global benchmarks. Companies that want access to the EU's large and wealthy market often adapt to EU regulations — a phenomenon known as the "Brussels effect".<sup>11</sup>

### Regulation vs. Innovation

However, regulation alone does not equal competitiveness. While the EU is winning the regulatory war, it risks falling behind in actual technological innovation. The US remains dominant in generative AI and platform-scale software companies, while China leads in hardware, data deployment, and AI implementation at scale. Europe's regulatory prowess has not yet translated into an ecosystem that consistently produces tech giants or attracts the lion's share of venture capital.

Regulation, if too rigid or slow to evolve, can even stifle innovation. The EU must be careful not to overplay its hand — balancing protective oversight with flexible, pro-growth frameworks.

### ***A New Path to Competitiveness***

That said, there is a path for the EU to turn regulatory leadership into economic strength. Clear and predictable rules can reduce uncertainty for startups and investors, making the EU a magnet for global capital and responsible tech development. Reg-tech startups — firms offering compliance automation, cybersecurity monitoring, and AI audit tools — could become a new growth sector. Further, if the EU can create regulatory sandboxes, public-private partnerships, and funding mechanisms around these frameworks, it could stimulate a new wave of innovation aligned with European values.

The EU cannot rely solely on regulation to remain globally competitive, but it can turn its strength in reg-tech into a distinct strategic advantage. By leveraging its role as a global rule-setter, and pairing it with targeted innovation incentives, Europe can attract talent, capital, and credibility — turning regulation from a defensive tool into a powerful engine of growth.

## **6. EU Regulation of Digital Platforms: Why Is It Stirring Geopolitical Tensions?**

The European Union is stepping up its oversight of digital platforms — and not everyone is happy about it. From the Digital Services Act (DSA) to proposals for a so-called “web tax,” the EU is targeting Big Tech’s dominance in Europe, particularly that of US-based platforms like Meta, Google, Amazon, and X (formerly Twitter). But the backlash is going far beyond the boardroom. Most recently, US Senator JD Vance claimed that if the EU takes regulatory action against X, the US should withdraw from NATO.<sup>12</sup> This raises a curious question: how did tech regulation become entangled with transatlantic defence alliances?

### ***Europe’s Regulatory Push***

The EU has long sought to rein in the power of Big Tech. The Digital Markets Act (DMA) and Digital Services Act (DSA) aim to ensure fair competition, algorithmic transparency, and greater accountability for harmful or illegal content. The DSA, in particular, places X under special scrutiny as a “Very Large Online Platform” (VLOP), subjecting it to rigorous rules on misinformation, hate speech, and content moderation.

On top of that, the EU has proposed a digital services levy, sometimes referred to as the “web tax”. While officially targeting large platforms with significant digital revenues in EU member states, it disproportionately affects US companies, which dominate the global tech ecosystem. Although the web tax remains contentious and unevenly adopted across member states, it symbolizes the broader EU ambition to make Big Tech “pay their fair share.”

### ***A Transatlantic Flashpoint***

The idea that US national defence strategy might hinge on whether X is fined or regulated by Brussels may seem far-fetched, but it reflects deeper anxieties in Washington. JD Vance’s remarks weren’t just about a single company — they signalled growing frustration with what some in the US see as EU “weaponization” of regulation against American firms. Critics argue that the EU is using its legislative powers to curb US economic influence under the guise of digital fairness and privacy.

But why bring NATO into it? That’s where politics and power intersect. To some, particularly in nationalist or anti-interventionist circles in the US, NATO represents a costly commitment to defending European interests — interests that, in this view, now include regulatory attacks on core US industries. The threat to pull support from NATO is rhetorical leverage, aimed at pressuring the EU to soften its stance on Big Tech.

### ***Is It Really Just a Conflict of Interest?***

At its heart, this is a clash of worldviews. The EU sees regulation as a way to protect citizens, promote digital sovereignty, and rein in monopolies. The US, especially under free-market advocates, views aggressive regulation

as anti-innovation and potentially protectionist. The fact that most of the companies targeted are American makes it feel personal.

There is also a cultural divergence: Europe prioritizes privacy and public oversight, while the US leans toward market freedom and corporate autonomy. When these models clash over global platforms, the fallout isn't just economic — it's geopolitical.

The friction between EU regulation and US tech dominance is more than a business dispute; it's a reflection of deeper tensions about sovereignty, fairness, and global power. While invoking NATO may be hyperbolic, it underscores how intertwined digital governance and geopolitical strategy have become. In the 21st century, controlling the digital public square may be as powerful as controlling military borders — and both sides know it.

## PART 3: Tech Advancements in US, China And Europe

### 1. The Perfect Triangle: AI, Quantum Computing, and Nuclear Fusion - and 2. Where the Three Powers Stand (U.S., China, EU)

As Cold War 2.0 between the United States and China accelerates, a new arms race is unfolding—not in missiles or submarines, but in the realms of artificial intelligence (AI), quantum computing, and nuclear fusion. These three technologies form a “perfect triangle” of strategic advantage, each amplifying the capabilities of the others. Mastery of this triangle will not only determine military superiority but also economic and energy dominance in the coming century. While the United States, China, and Europe are all investing heavily, the balance of power remains in flux.

#### **AI: The Race for Cognitive Supremacy**

##### *United States*

The United States currently leads in foundational models and commercial AI deployment, with companies like OpenAI, Google DeepMind (U.S.-based despite its UK origins), and Anthropic setting the global pace. As of 2024, the United States maintains a leading position in the development of large language models (LLMs) and in attracting private investment in artificial intelligence (AI). According to a Stanford University index, U.S. private AI investment totalled \$67.2 billion in 2023, significantly surpassing other countries, with China investing \$7.8 billion in the same period. Additionally, the U.S. accounted for 23.4% of the global LLM market revenue in 2024, indicating a substantial share in this sector. These figures underscore the United States' dominant role in AI innovation and investment on the global stage.<sup>13</sup>

Silicon Valley's private sector dynamism, a mature venture capital ecosystem, and privileged access to cutting-edge semiconductors like NVIDIA's H100 chips have provided the U.S. with a significant advantage. Furthermore, the U.S. Department of Defence has been expanding initiatives such as Project Maven and the Joint Artificial Intelligence Centre (JAIC), underscoring the integration of AI into defence operations.

In January 2025, the U.S. further solidified its leadership in AI with the announcement of the Stargate Project, a \$500 billion initiative co-led by OpenAI, SoftBank, and Oracle. This ambitious venture aims to invest in new AI infrastructure across the United States over the next four years, beginning with an immediate deployment of \$100 billion. The Stargate Project is expected to create hundreds of thousands of American jobs and generate significant economic benefits globally. This substantial investment underscores the nation's commitment to maintaining and enhancing its competitive edge in artificial intelligence.

##### *China*

China, however, is rapidly closing the gap, leveraging a state-directed model that combines strategic planning with grassroots innovation. A pivotal development in this trajectory is the emergence of DeepSeek, a Hangzhou-based AI startup that has garnered international attention with its R1 model, released in January 2025, which delivers performance comparable to leading Western counterparts like OpenAI's GPT-4. Notably, DeepSeek developed R1 at a fraction of the cost—approximately \$5.6 million—compared to the estimated \$100 million for GPT-4. This cost efficiency was achieved through innovative training techniques, including the use of a Mixture of Experts (MoE) architecture, which activates only a fraction of the model's parameters per query, leading to significant computational savings.<sup>14</sup>

This achievement challenges the assumption that restricting China's access to advanced semiconductors would significantly hinder its AI progress. DeepSeek's success has prompted other Chinese AI startups to reevaluate their business models, leading to a consolidation around a few leaders and a shift towards application development over foundational models.

Beyond DeepSeek, Chinese tech giants such as Alibaba, Tencent, and Huawei are deploying AI at scale across surveillance systems, logistics networks, and military simulations. In 2023, China filed over 29,000 AI-related patents—more than any other country—and has launched numerous national AI pilot zones. The integration of AI across civilian and military domains is central to China's strategy, with the People's Liberation Army (PLA) emphasizing "intelligentized warfare" as a key pillar of future combat. Additionally, the Chinese government's ability to collect and centralize vast datasets enhances model training, providing a competitive edge in AI development.

### *Europe*

Europe, by contrast, lags behind in foundational AI models and commercial deployment, holding less than 5% of the global market share in AI unicorns. Few European firms rival the scale or technological depth of their U.S. or Chinese counterparts, and investment flows remain fragmented across member states. However, the European Union has assumed a leading role in AI governance, ethics, and regulatory frameworks. The AI Act, passed in 2024, is the world's first comprehensive legal framework for AI, classifying systems by risk and imposing strict transparency, safety, and accountability requirements. While this regulatory approach may slow innovation and deployment relative to the U.S. and China, it positions Europe as a normative power capable of shaping international AI standards, much like it did with the General Data Protection Regulation (GDPR) for data privacy.

The recent Paris AI Safety Summit further highlighted regulatory divergences between the U.S. and Europe. U.S. Vice President JD Vance, in his address, cautioned against "excessive regulation" that could stifle the burgeoning AI industry, advocating for a free-market approach to foster innovation. This stance contrasts sharply with Europe's emphasis on stringent regulations to mitigate AI's risks. The U.S. and the UK notably declined to sign the summit's declaration on "inclusive and sustainable" AI, underscoring differing global perspectives on AI governance.

### **Quantum Computing: Decoding the Future**

Quantum computing, though still in its early stages, holds transformative potential across various sectors, including cryptography, materials science, pharmaceutical discovery, and complex simulations beyond the capabilities of classical computers. One of its most profound implications is the potential to break current encryption standards, posing significant challenges to global cybersecurity. As of March 2025, the global quantum industry is experiencing unprecedented growth and investment, with worldwide investments exceeding \$44.5 billion.

### *United States*

The United States continues to lead in quantum research and commercialization. Tech giants like IBM, Google, and Microsoft have achieved significant milestones. In February 2025, Microsoft announced the creation of "Majorana 1," a quantum computing chip utilizing a new state of matter to enhance computational power. This chip employs a topological superconductor to develop reliable and powerful qubits, potentially integrating one million qubits on a single small chip. Additionally, companies like Quantinuum have demonstrated genuine randomness in quantum computation, collaborating with institutions like JPMorgan Chase and federally-backed research labs.

The U.S. government's commitment is evident through initiatives like the National Quantum Initiative Act and the CHIPS and Science Act, channelling substantial funding into quantum R&D. As of 2024, the U.S. hosts the highest number of quantum computing patents globally and leads in venture capital investment in the field.

### *China*

China is rapidly advancing in the quantum computing arena, leveraging a state-directed model that combines strategic planning with substantial investment. In March 2025, Chinese scientists unveiled "Zuchongzhi 3.0," a superconducting quantum computer prototype with 105 qubits, marking a significant breakthrough in China's quantum computing capabilities.

The Chinese government has invested over \$15 billion in quantum technologies, establishing cities like Hefei as quantum hubs. China is also pioneering quantum communication networks, including a 2,000-kilometer Beijing-Shanghai quantum communication backbone, and integrating quantum technologies into its military infrastructure. These efforts underscore China's commitment to achieving quantum supremacy and securing a leading position in this critical technological domain.

### *Europe*

Europe maintains a strong presence in fundamental quantum research and collaborative initiatives. Countries such as Germany, the Netherlands, Austria, and France host renowned institutions like QuTech in Delft and the Max Planck Institute for Quantum Optics. The European Union's Quantum Flagship initiative, backed by over €1 billion since 2018, has fostered cross-border research projects.

Despite these efforts, Europe's fragmented industrial base and slower commercialization pace have left it trailing behind the U.S. and China in scaling hardware and deploying practical quantum systems. As of 2025, European quantum startups have raised significantly less funding compared to their American and Chinese counterparts.

### ***Nuclear Fusion: The Energy Holy Grail***

Fusion energy, often heralded as the "holy grail" of clean power, has witnessed significant advancements across the United States, China, and Europe in recent years. Each region has adopted distinct strategies, reflecting their unique priorities and capabilities in the pursuit of harnessing fusion as a virtually limitless energy source.

### *United States*

The United States has maintained a leadership role in fusion research, marked by groundbreaking achievements and substantial private sector involvement. In December 2022, scientists at the Lawrence Livermore National Laboratory's National Ignition Facility (NIF) achieved a historic milestone by producing more energy from a fusion reaction than was delivered to the fuel, demonstrating the potential for net energy gain. This achievement underscored the viability of inertial confinement fusion as a pathway to sustainable energy.

Beyond government-led initiatives, the U.S. boasts a vibrant private fusion sector. Companies like Helion Energy and Commonwealth Fusion Systems (CFS) have attracted significant investment to accelerate the commercialization of fusion technology. Helion Energy, for instance, secured \$500 million in Series E funding in 2021, with an additional \$1.7 billion contingent on achieving specific milestones. CFS, a spin-off from the Massachusetts Institute of Technology, raised \$1.8 billion in Series B funding the same year to support the development of its SPARC tokamak, aiming to demonstrate net energy gain and pave the way for commercial fusion power plants.

The U.S. Department of Energy has further bolstered fusion research through initiatives like the Milestone-Based Fusion Development Program, which, as of May 2023, provided \$46 million in grants to eight companies across seven states. This program aims to advance fusion pilot plant designs within the next decade, aligning with objectives to develop fusion as a carbon-neutral energy source by 2050.

### *China*

China has emerged as a formidable contender in the global fusion arena, characterized by aggressive investment and rapid technological advancements. The Chinese government reportedly invests nearly \$1.5 billion annually in fusion energy research, almost double the U.S. fusion budget, reflecting a strategic commitment to achieving fusion breakthroughs.

A centerpiece of China's fusion efforts is the Experimental Advanced Superconducting Tokamak (EAST), often referred to as the "artificial sun." In January 2025, EAST set a new world record by maintaining plasma temperatures over 100 million degrees Celsius for 1,066 seconds, demonstrating remarkable progress in sustaining the extreme conditions necessary for fusion reactions.

In addition to EAST, China is constructing a large laser-ignited fusion research facility in Mianyang, southwestern China. Satellite imagery from January 2025 reveals a layout similar to the U.S. National Ignition Facility, with a central chamber estimated to be 50% larger. This facility could significantly advance China's capabilities in both energy generation and nuclear weapons design.

### *Europe*

Europe's fusion strategy is epitomized by its leadership in the International Thermonuclear Experimental Reactor (ITER) project, the world's largest fusion experiment, located in France. ITER represents a monumental international collaboration involving the European Union, China, India, Japan, Korea, Russia, and the United States. Europe, through Fusion for Energy (F4E), contributes nearly half of ITER's construction costs and is responsible for key components such as the vacuum vessel and magnets.

Despite ITER's significance, the project has faced challenges, including bureaucratic complexities and funding constraints, which have slowed progress. To complement ITER and expedite fusion development, European nations are increasingly supporting domestic initiatives. For instance, in January 2025, the UK government pledged a record £410 million to support nuclear fusion energy, aiming to construct a leading fusion power project at the decommissioned West Burton coal-fired power plant by 2040. This investment underscores the UK's commitment to becoming a leader in fusion energy and contributes to its net-zero ambitions.

The European private sector is also gaining momentum. German start-up Marvel Fusion raised €113 million in Series B funding to advance its laser-based fusion technology, with plans to build a prototype by 2032 and a commercial power plant by 2036. Similarly, U.S.-German fusion energy startup Focused Energy signed an agreement in March 2025 to build a fusion pilot plant at the site of the closed Biblis nuclear plant in Germany by 2035, with projected costs between €5 billion and €7 billion.

### ***A New Tech Trifecta Arms Race***

In Cold War 2.0, the triangle of AI, quantum computing, and nuclear fusion constitutes the new high ground. The U.S. retains a lead in innovation, China excels in integration and scale, and Europe brings regulatory and scientific depth. The outcome of this triangular tech race will not only define economic leadership but also redraw the geopolitical map for generations to come.

### **3. Financing Innovation: finding resources between public sector budget constraints and financial sector conservative approach. The case for EU bonds to finance innovation**

While there is widespread consensus on the need for a European industrial revival, the question remains: who will pay for it? Many EU nations, particularly Germany and the Netherlands, are reluctant to take on joint debt to fund large-scale industrial initiatives. This fiscal conservatism has created a stalemate, preventing ambitious proposals—such as a European sovereign wealth fund for industrial investment—from gaining traction.

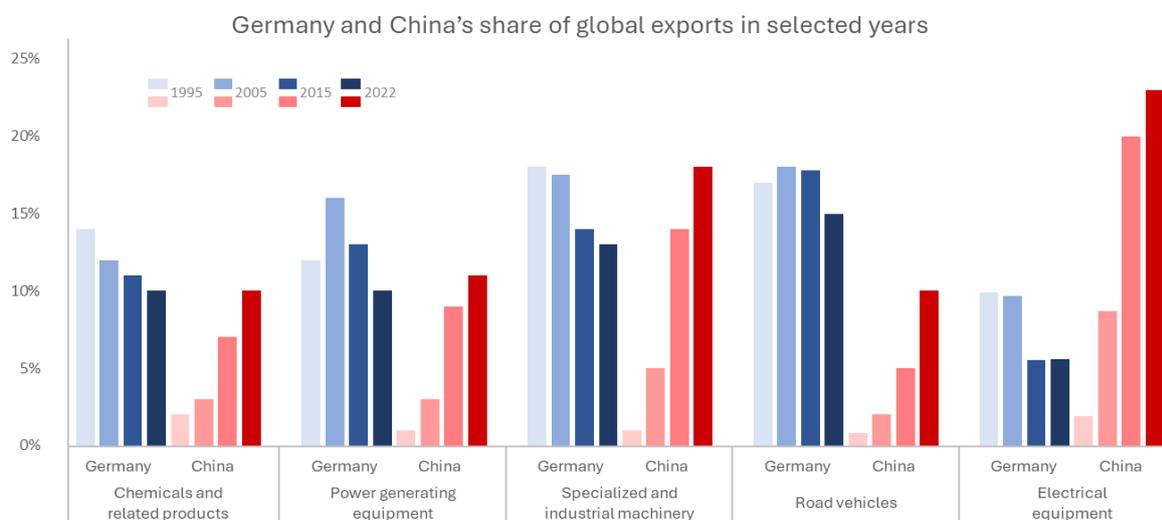
Draghi's report suggests that Europe needs a new governance framework to coordinate industrial policy across the bloc, ensuring that national and EU-level strategies align. Without such coordination, member states will continue to pursue disjointed, often competing industrial strategies, weakening Europe's overall competitiveness.

The stakes are high. If the EU fails to develop a cohesive industrial policy, it risks becoming an economic backwater—dependent on American technology, Chinese manufacturing, and increasingly expensive energy imports. The choice is clear: either Europe reclaims its industrial leadership, or it resigns itself to permanent strategic and economic dependence on external powers. The coming years will determine whether Europe has the political will to act on Draghi's warnings, or whether its industrial decline will continue unabated.

### Middle Technology Gap

Europe’s struggles in the global innovation race stem from a deeper structural issue: the “middle technology trap.” For over two decades, innovation in the EU has been dominated by a few large firms, particularly in the automotive sector, with limited investment in breakthrough technologies. Meanwhile, the U.S. leveraged the digital revolution to drive growth in software, AI, and advanced manufacturing. Existing EU programs, such as the European Innovation Council (EIC), have failed to bridge this gap. Burdened by politicized decision-making, an overemphasis on collaboration, and excessive reliance on venture capital, they lack the mechanisms needed to foster transformative innovation. To address these shortcomings, Draghi advocates for an ARPA-style governance model to fund high-risk, high-reward projects and strengthen the scientific expertise of the EIC Board. Additionally, he calls for outsourcing venture capital activities to specialized funds to improve resource allocation and impact (Figure 7).

**Figure 7: China Takes Over Advanced German Manufacturing**



Sources: Rhodium Group

The energy sector is another area where the EU faces deep structural weaknesses. The continent’s postwar prosperity was built on cheap Russian gas, a luxury that no longer exists. Draghi argues that for Europe to maintain its economic competitiveness, it must drastically rethink its energy policy, focusing on nuclear power, hydrogen, and energy storage solutions. However, differences among EU member states—with some countries phasing out nuclear energy while others expand it—continue to slow progress.

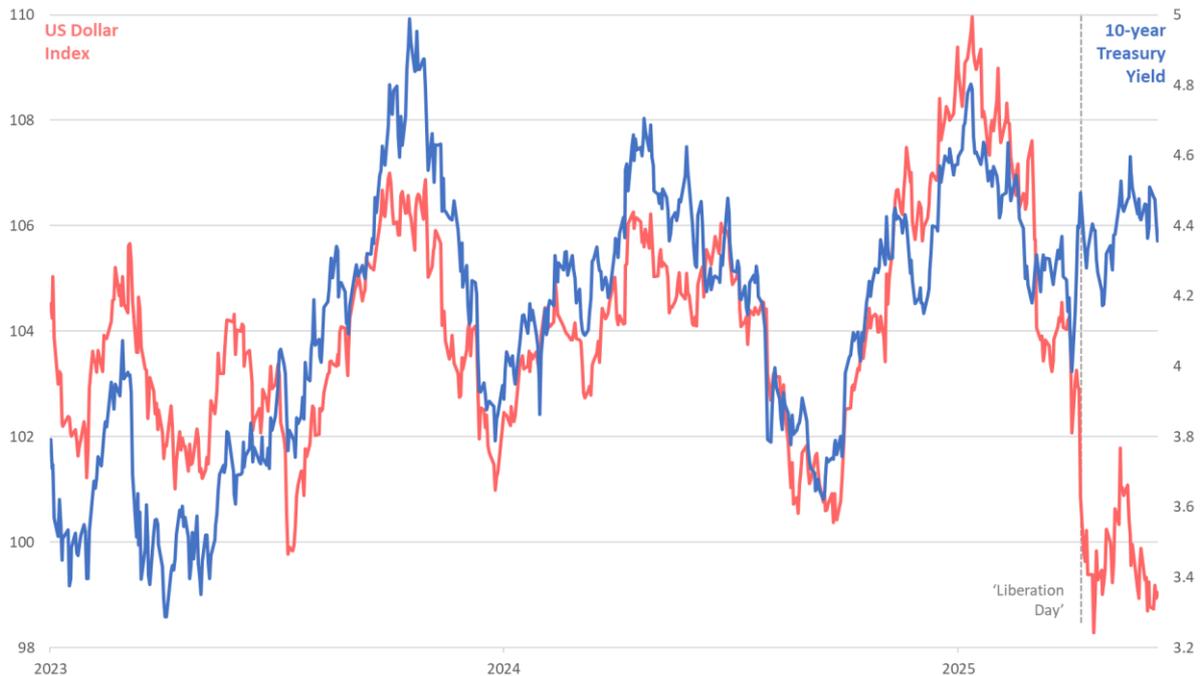
Nowhere is the shift in industrial policy more apparent than in defence and security. The war in Ukraine has forced Europe to confront the reality that it cannot rely indefinitely on U.S. military protection. The United States, under Trump’s leadership, has made it clear that Europe must take greater responsibility for its own defence, leading to an urgent push for a stronger European military-industrial base. Yet, decades of underinvestment in defence production mean that Europe cannot manufacture enough ammunition, armoured vehicles, or drones to sustain long-term military operations.

#### 4. US: Between US seemingly unlimited borrowing ability and private sector aggressiveness

For the last few decades, the United States has benefited from what has long been termed its “exorbitant privilege” — the unparalleled position of the U.S. dollar as the world’s dominant reserve currency. This status has afforded Washington the ability to borrow on a vast scale, often with minimal repercussions. Even fiscally constrained regions like the European Union readily absorb U.S. debt in pursuit of safe, liquid assets. While most nations must have been forced to calibrate borrowing to market sentiment, the U.S. has retained extraordinary fiscal flexibility, allowing it to finance large deficits with relative ease.

This perception has changed in the last few months. “Liberation Day” announcements have severely undermined the trust of international investors in USD denominated assets (equities, bonds, credit, currency), which have sold-off in sync, as during EM crises. For the first time, US Treasury yields and USD have started to go in opposite directions (**Figure 8**).

**Figure 8: The Relationship Between USD and UST Yields Has Broken Down**



Source: LSEG via the Financial Times

The situation has further deteriorated with the approval of the “Big, Beautiful Bill” by the House of Representatives, which is estimated to add at least USD 2.4tn of debt in coming years. The domestic repercussions have been huge, since they have led to the “divorce” between Trump and his main donor, Elon Musk, who defined the bill “a disgusting abomination.” Major financial institutions in the US have expressed concerns for the increase in the level of debt, which seems unstoppable. Internationally, the level of confidence in the USD has further deteriorated, as investors are looking for viable alternatives, which currently don’t exist.

In this context, the U.S. private sector—particularly its tech giants—is emerging as a dominant political force. What was once a subtle shift has become a full-blown “tech takeover,” exemplified by the growing political roles of figures like Elon Musk and Peter Thiel. Under the Trump administration, Musk was tasked with leading the Department of Government Efficiency (DOGE), despite the enormous conflicts of interest posed by his corporate empire, including SpaceX and Starlink.

Peter Thiel, aligned with Vice President J.D. Vance, is expected to further push for deregulation and policies favourable to Big Tech and his pet company, Palantir, has been asked by the administration to compile a database of all Americans, with the information extracted by DOGE. This moment marks a critical acceleration in the erosion of the state’s regulatory capacity—first hollowed out by the financial sector in the 1990s and now further dismantled by Silicon Valley. The result is a powerful blend of fiscal privilege and private sector dominance that risks undermining democratic accountability and reshaping the global governance landscape.

Meanwhile, the recent attacks on academic freedom by the US administration risk undermining the possibility for the US to maintain its technological edge in coming years. Many academics are relocating to Europe, and investors may be less willing to allocate their capital if academic and scientific freedom and the rule of law are severely questioned by the Administration.

## 5. China: The Role of the State and SOEs in Financing Innovation at the Time of Incipient Deflation

As China navigates a period of economic slowdown and incipient deflation, the role of the state and its state-owned enterprises (SOEs) in financing innovation has become a focal point of economic policy. Unlike many Western economies, where market forces primarily dictate innovation investments, China's approach remains deeply intertwined with state intervention, industrial policy, and strategic planning. The Chinese government has increasingly positioned SOEs as key vehicles for fostering technological development and economic security, particularly in critical and emerging industries. However, the effectiveness of this strategy remains debated, with concerns about efficiency, resource allocation, and competition with private firms.

### *The Role of SOEs in China's Economic Framework*

China's SOEs have long served as instruments of state industrial policy. While many economies have moved away from state ownership in favour of market-driven innovation, China has doubled down on its use of SOEs to drive technological breakthroughs, particularly in strategic sectors such as semiconductors, artificial intelligence, and renewable energy<sup>15</sup>.

SOEs are divided into three main categories under the supervision of the State-Owned Assets Supervision and Administration Commission (SASAC): Key Industries, including defence, telecom, electricity, and rail; Pillar Industries, such as automotive, equipment manufacturing, and construction; and Normal Industries, which encompass agriculture, pharmaceuticals, real estate, and tourism. This structured approach enables the state to exert control where it deems necessary while allowing partial liberalization in competitive industries.

The role of SOEs has evolved significantly since the economic reforms of the 1980s. Deng Xiaoping's market liberalization policies enabled a shift towards private sector-led growth, but under President Xi Jinping, there has been a renewed emphasis on strengthening SOEs. However, this does not necessarily signal a retreat from the private sector. Instead, the Chinese government has implemented a strategy of "grasping the big, letting go of the small" (zhuada fangxiao), where state ownership is consolidated in strategic sectors while allowing market forces to operate elsewhere<sup>16</sup>.

### *Financing Innovation Through SOEs*

At a time when deflationary pressures threaten economic stability, China's ability to sustain innovation and productivity growth is increasingly reliant on its SOEs. State-directed financing plays a crucial role in shaping the trajectory of innovation, particularly through initiatives that direct capital into emerging and high-tech industries<sup>17</sup>. One of the most significant aspects of SOE reform under Xi has been the transition from "management of assets" to "management of capital." This shift enables the government to direct state capital toward strategic industries while reducing direct interference in corporate management. The result is a more market-oriented approach within state-controlled firms, increasing their ability to compete with private enterprises.

A prime example of this strategy in action is the Guangzhou Automobile Group (GAC). Traditionally reliant on joint ventures with Honda and Toyota, GAC transformed its business model through state-directed investment in electric vehicle (EV) technology. This allowed its sub-brand, Aion, to emerge as one of the best-selling EV models in China, demonstrating how SOE reform can enhance competitiveness without stifling market dynamism.

### *China's Innovation Drive: The Case of Advanced Industries*

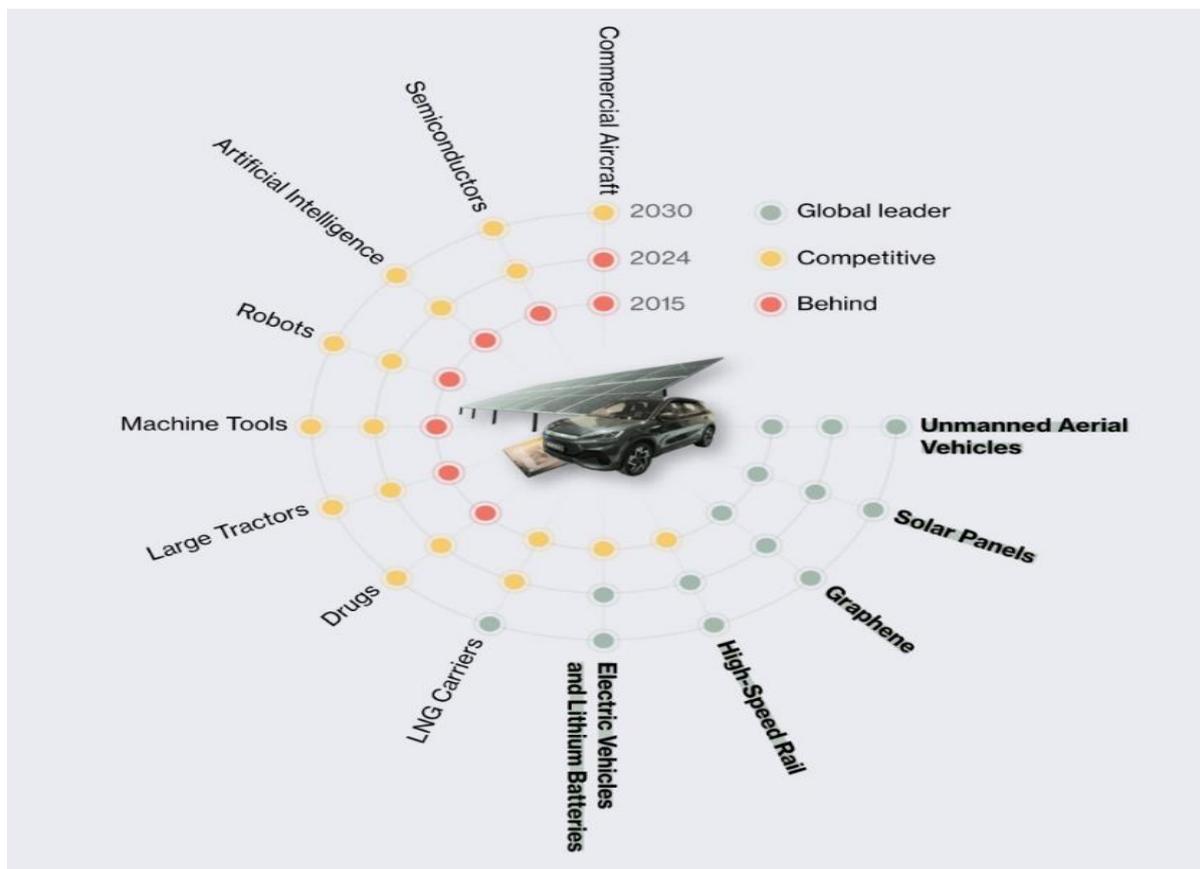
China's push for technological self-sufficiency is evident in its investment patterns, particularly in industries such as semiconductors, artificial intelligence (AI), and clean energy. Reports suggest that China has either surpassed or is rapidly catching up with global leaders in sectors such as commercial nuclear power, EV batteries, and telecommunications<sup>18</sup>.

However, innovation among SOEs has been a mixed success. While China boasts the highest number of firms on the Fortune Global 500, many of these SOEs exhibit lower profitability and return on assets compared to their private counterparts. A CSIS report highlighted that SOEs often rely on preferential access to loans and government contracts, creating an uneven playing field that can discourage private-sector competition. SOEs receive significant state backing in the form of subsidies, preferential loans from state-owned banks, and guaranteed contracts from the government. For example, China National Nuclear Corporation (CNNC) has led the way in nuclear energy development, while China Railway Rolling Stock Corporation (CRRC) has transformed the country into a global leader in high-speed rail<sup>19</sup>.

**Government-Led Investment in High-Tech Sectors**

Recognizing the need for greater technological self-sufficiency, the Chinese government has launched major industrial policies such as "Made in China 2025" and the China Science and Technology Innovation Plan. These initiatives aim to transition China from a low-cost manufacturing hub to a leader in advanced industries such as biotechnology, quantum computing, and aerospace. China has already achieved a global leadership in five key technologies (Figure 9). The figures are staggering: In 2000, China accounted for 6% of global manufacturing, while in 2030, China is projected to account for almost half of all global manufacturing<sup>20</sup>.

**Figure 9: China’s Achieving Growing Cloud in Key Made in China 2025 Industries**



Source: [Bloomberg](#)

**Conclusion**

China’s approach to innovation financing at a time of economic uncertainty is deeply rooted in state intervention, yet it is evolving to incorporate more market-oriented mechanisms. SOE reforms, mixed-ownership models, and institutional innovations in Free Trade Zones collectively shape China’s economic strategy. However, challenges persist, particularly in ensuring that SOEs operate efficiently and do not crowd out the private sector. As

deflationary pressures mount, the ability of China's innovation ecosystem to sustain long-term growth will depend on how well it balances state-led investment with market-driven dynamism.

## PART 4: Scenario Analysis and General Conclusion

The re-election of Donald Trump and the speed at which his administration is implementing his agenda both internally and externally are changing global equilibria. What is clear from the first days is the new administration's determination in stopping China's ascent as a global superpower in order to maintain US' leadership.

In order to achieve this, the new administration is implementing (or threatening to implement) a number of initiatives such as tariffs, seeking control of strategic maritime routes, trying to de-couple Russia from China, etc. Such initiatives implemented with very bold moves (including the threat of the use of force if necessary) have the clear objective to intimidate opponents and traditional allies alike.

### 1. Three Scenarios For The US

In order to ascertain the economic impact of this strategy, we consider three possible scenarios. A positive, a negative and a baseline scenario.

#### *Scenario 1: The US Grows Exponentially Thanks To its Tech Lead*

According to this positive scenario, [advocated by Nouriel Roubini in recent publications](#), the US economy's potential growth will approach 4% by 2030, far above the International Monetary Fund's recent estimate of 1.8%, given American predominance in most of the tech industries that will define the future. The US is likely to lead on: AI/Gen AI, Machine Learning/causal ML leading to AGI by 2030 and eventually ASI; robotics and automation including massive emergence of humanoid robots; bio-med research and synthetic biology; quantum computing and its merger with AI; space exploration and exploitation; AI-led semi-autonomous weapon systems for a new era of warfare and related defense tech; Ag-tech; fusion energy than more than renewable will resolve climate change; green tech and new frontiers of geo-engineering; fin-tech with most of it not based on DLT; new material science leading to new materials and types of manufacturing; cybersecurity and new forms of cryptography, while China will only lead in electric vehicles and other green tech.

In this scenario, growth increases exponentially and not logarithmically, giving the first mover a massive advantage that others won't be able to catch up. This will allow potential growth to increase from 2% to 4% by 2030 and from 4% to 6% by 2040. Let's focus on the first step. If growth rises from 2% to 4% because of technology, this represents a 200-basis-point boost to potential growth. On the other hand, even draconian trade protections and migration restrictions would reduce potential growth by only 50 bps at most, in a favourable scenario. That is a four-to-one ratio between positives and negatives.

The AI-driven investment boom also implies that, with or without high tariffs, the US current-account deficit will remain high and on an upward trajectory (reflecting the difference between sluggish savings and booming investment). In this scenario, portfolio inflows will continue despite the trade-policy noise. Although fixed-income investors may pull out of US assets and the dollar, equity investors will remain overweight on US assets, perhaps even doubling down. Any substantial weakening of the dollar will be gradual, and the greenback will not suddenly lose its role as the global reserve currency.

Over time, higher growth, combined with existing redistribution policies, will weaken populist forces in the US. Meanwhile, Europe will continue to face the headwinds of demographic aging, energy dependence, an overreliance on Chinese markets, weak domestic innovation, and stagnant growth hovering around 1%.

#### *Scenario 2: The US Descends Into Autocracy That Stifles Innovation And Growth*

At the other side of the spectrum, there's the completely opposite scenario. Instead of being in a "Tech Trump Tariffs" situation, we end up in a "Trump Trashes Democracy" scenario. Under this scenario, all the more authoritarian instincts of the President are translated into a legislation and policies, and the US becomes an authoritarian regime.

Some of the initial elements are emerging. On inauguration day, January 20, 2025, President Trump signed an executive order titled “Declaring A National Emergency At The Southern Border Of The United States”, which also mandates “*within 90 days of the date of this proclamation, the Secretary of Defense and the Secretary of Homeland Security shall submit a joint report to the President about the conditions at the southern border of the United States and any recommendations regarding additional actions that may be necessary to obtain complete operational control of the southern border, including whether to invoke the Insurrection Act of 1807.*”

If the [Insurrection Act of 1807 were to be invoked](#), the president of the United States could nationally deploy the U.S. military and federalize the National Guard units of the individual states in specific circumstances, such as the suppression of civil disorder, of insurrection, and of armed rebellion against the federal government of the US. The Insurrection Act provides a statutory exception to the Posse Comitatus Act (1878) that limits the president's deploying the US military to enforce either civil law or criminal law within the United States.

Another idea that has been flagged, is the suspension of “habeas corpus” i.e. the juridical foundation of the “due process” for every individual in the US, even non-citizens. The privilege of the writ of habeas corpus, which protects individuals from unlawful detention, has been suspended four times in US history: during the Civil War, in parts of South Carolina during Reconstruction, in the Philippines during a rebellion, and in Hawaii after Pearl Harbor. These suspensions were all authorized by Congress or by executive action in situations where the public safety was deemed to require it.

Together with the fiscal provisions, the Big Beautiful Act also contains provisions that would make it much harder for Courts to find individual in contempt of court for disobeying a Court order (something that members of the current administration have repeatedly done).

The attacks to academic freedom, epitomised by the standoff between the government and Harvard, are yet another example of the reduction in liberal values in America.

When all this is compounded, one can see a passage of the US from the status of “liberal democracy,” where elections are accompanied by freedom of press and independence of the judiciary, to “electoral democracy” in which these two elements are severely reduced. The implications for the economy would be enormous, as investors would shy away from US assets, even when alternatives are not as established.

### *Scenario 3: Continued Volatility and Reduced Growth*

Between these two extremes, the eventual baseline scenario emerges. The US economy will continue to be propelled by the tech investment made over the last few years, and likely to outperform other mature economies, such as Japan and Eurozone. At the same time, continued threats to the rule of law, democratic norms, academic freedom will continue to undermine investor confidence in the US and their assets, even if the USD will not be replaced, for now, as international reserve currency. The market will continue to be the main guardrail against the most authoritarian impulses.

The US will continue to retrench within the borders of North America, defined as the land between the Panama Canal and Greenland, via Canada, leaving traditional allies in Europe and Asia to deal with their respective threats (Russia and China) mostly via domestic means, i.e. a significant increase in their defence and security budgets. In the short run this means that the war in Ukraine and in Gaza (with the Iranian “appendix”) will continue for longer, and that the hope for “peace” will soon be replaced by the attempt to achieve a series of temporary and fragile truces. The best hope for the Ukrainians at this stage is achieving a freezing of the conflict around current borders, patrolled by Americans and Europeans. But this will require plenty of pressure from the US on Russia, which is not yet on the horizon.

Taiwan will soon realise that the US umbrella is more theoretical than practical: the possibility of defending the island from a potential Chinese invasion is more a textbook concept than a concrete reality.

With this approach, the confidence of traditional allies in US leadership is rapidly eroding: a new, multipolar world is emerging, and China will extend its vast sphere of influence through the countries of the Belt and Road

Initiative over the continents: Asia, Africa, Middle East, Latin America, Eastern Europe. Initially China will continue to expand its influence with peaceful means, but will continue to build its army, in case of future challenges.

## **2. The Potential Role of Europe**

Once the US scenarios have been laid out, the big question mark remains the European Union's reaction. Despite all its problems and internal debates, the world's largest economic area has a unique chance to position as the new centre for global stability, respect of the rule of law and of people. It has already demonstrated its ability to move fast when the situation requires it, overcoming significant crises. The European Union has a unique opportunity to become the new safe haven:

- For International students and research, which will impact innovation
- Because it respects the Rule of international Law
- For global investors it could provide financial stability, if it manages to create depth in the EU-bond market;
- If its military posture and resilience is credible.

Article 42.7 of the Treaty of the European Union states guarantees solidarity amongst Member States in case of an armed aggression against any one of them. The clause requires all other Member States to provide assistance in response once activated by an attacked Member State.

A decision of Russia to attack Baltic States or any other EU member would generate a common reaction from all EU members. The failure to do so would mean the end of the EU. A strong common reaction would instead accelerate the process toward giving the EU a central role at the global level.

The significant investments in defence, perhaps financed by common debt, represent a one-in-a-generation opportunity to rebuild its industrial base and to get rid of internal trade hurdles. Europe needs to evolve, be confident about its strengths, stick to its universal principles in order to fight and win against the new "the coalition of reactionaries".

## NOTES

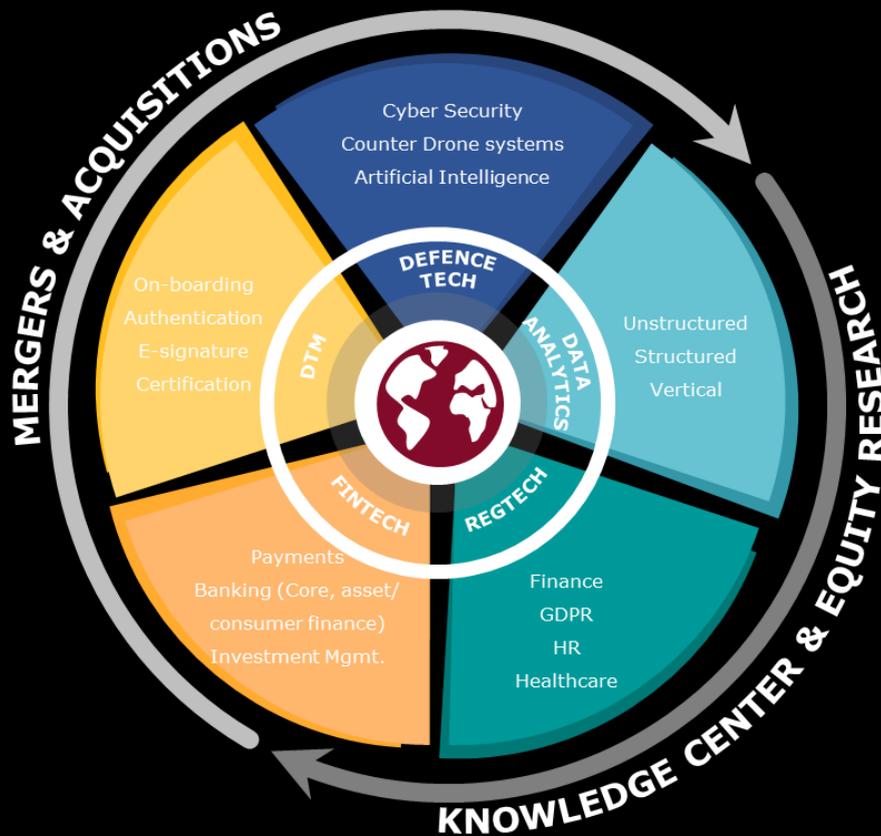
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