From strategic autonomy to economic security:

a framework for Europe's next semiconductor policy initiatives

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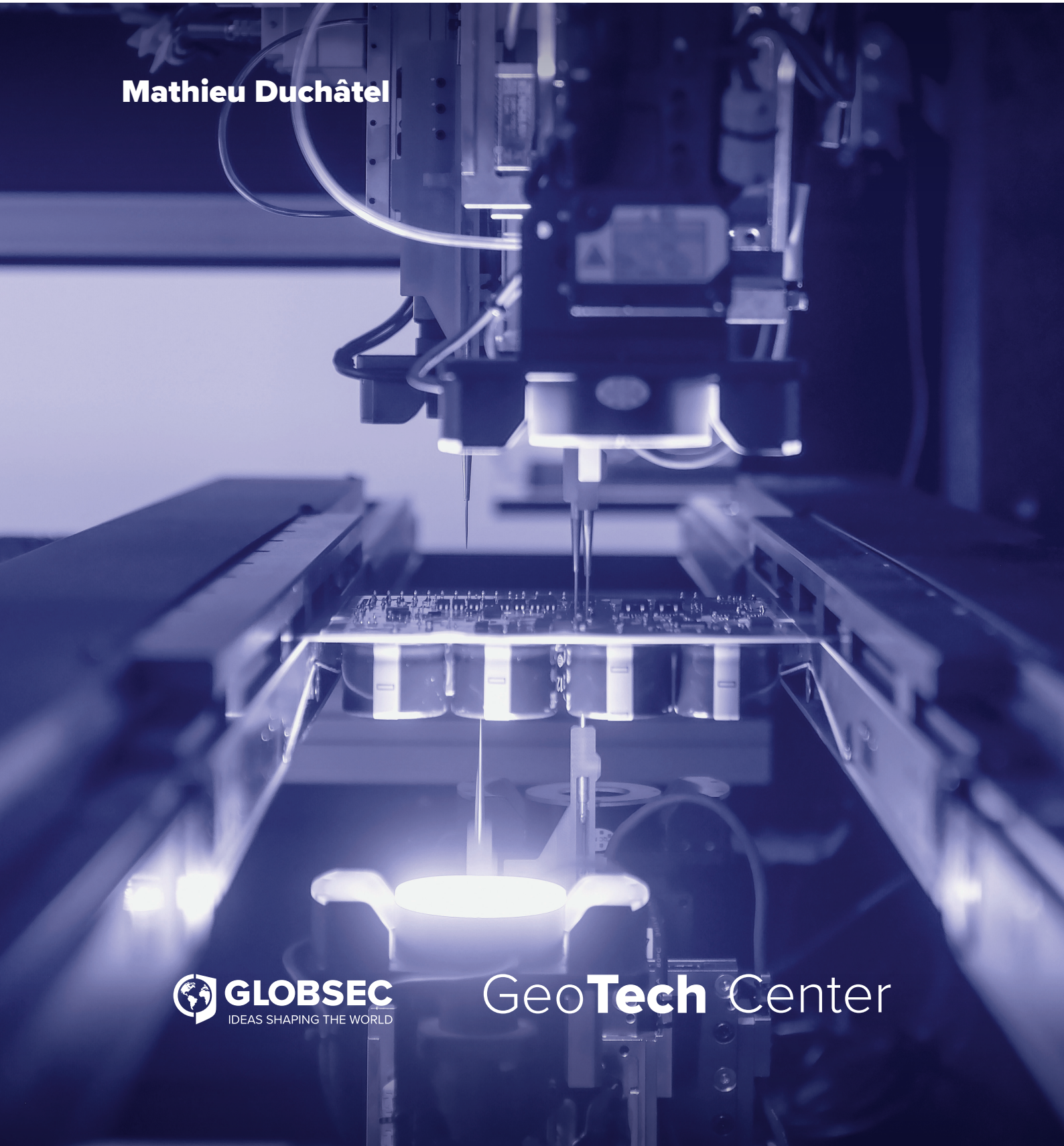

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Executive summary

Europe's ambition for semiconductor strategic autonomy

has met significant limitations, with its global market share, as projected by the Commission, set to stagnate at around 11.7% by 2030, well short of the 20% target set by the 2023 EU Chips Act. While Europe excels in segments like power electronics and equipment manufacturing, its limited presence in high-growth areas like logic and memory chips, coupled with fierce global competition and geopolitics, hampers its progress. The concept of "strategic autonomy" has proven divisive and vague, leading to calls for a more practical framework based on the EU's 2023 Economic Security Strategy emphasizing resilience and competitiveness.

The concept of strategic autonomy,

though rooted in defence policy, has spilled into industrial and economic debates. Yet it is rarely invoked directly in semiconductor legislation or speeches by EU leaders, suggesting a strategic avoidance due to its polarizing nature. In contrast, terms like "economic security" and "resilience" are gaining traction. The Chips Act emphasizes boosting innovation and addressing supply chain fragility over full independence. This mirrors a broader shift toward managing interdependence rather than severing it, showcasing a pragmatic recognition of Europe's entrenched position in global value chains.

Europe's semiconductor ecosystem

faces three interlinked risk domains: geopolitical instability in East Asia, geo-economic friction from U.S.-China rivalry, and internal economic constraints such as industry fragmentation and workforce shortages. Despite awareness of these challenges, coordinated policy responses remain inadequate. Pillar III of the Chips Act, designed for real-time monitoring, has yet to reach full implementation. Better intelligence sharing and targeted interventions are essential to navigate escalating risks and support sectors like automotive and defence that rely on mature chips.

Europe must cultivate strategic indispensability.

Preserving monopolies like ASML's in EUV lithography and leveraging R&D excellence is critical but so is generating the customer base for advanced manufacturing capabilities in logic chips. Addressing capital shortfalls, talent gaps, and industrial clustering inefficiencies will be key, as will aligning trade, export controls, and economic intelligence cooperation with international partners. Ultimately, Europe's success hinges not on elusive autonomy but on operationalizing economic security through coordinated and stably funded initiatives.

Introduction

The European Commission has made it clear: the European Union is not on track to meet its Digital Decade target of securing 20% of the global semiconductor market by value by 2030. The overarching goal of the 2023 Chips Act will be missed. According to recent Commission statistics, Europe accounted for 11% of global semiconductor value chain revenues in 2023. This marked a modest improvement from 9.1% in 2021, a figure often cited in policy discussions. However, it remains a far cry from the 44% share held in 1990. The Commission now projects a global market share of just 11.7% by 2030. If this materializes, the next half decade will see an overall trajectory of relative stagnation for Europe vis-à-vis East Asia and America.[1]

Of course, Europe's position varies across different segments of the semiconductor value chain. Global semiconductor revenues are projected to reach $687 billion in 2025—an annual growth of 12.4% compared to 2024. While this strong performance is welcome news for the industry, the growth is largely concentrated in logic and memory, two segments where Europe has limited capacity.[2] In addition, in traditional strength areas such as equipment manufacturing, power electronics, wafer equipment and energy-efficient wafer fabrication processes, European companies face intensifying competition from China, which is catching up rapidly through ambitious industrial policies and highly efficient manufacturing capabilities.

This competitive pressure is compounded by two external factors. First, the strategic rivalry between the United States and China introduces barriers to technology transfers, risks to access to critical raw materials (most of which are processed in China), and growing incentives to pursue techno-nationalism policies. Second, innovation is driven by technological champions such as Nvidia, TSMC or SK hynix, whose scale allows for massive R&D expenditure which even national budgets cannot match. Against this backdrop, Europe's semiconductor sector requires renewed active policy intervention.

The European Court of Auditors has offered two concrete recommendations following its recent review of the Chips Act's implementation:

- Conduct an urgent reality check on the current strategy and take short-term corrective actions during the course of 2025.
- Begin preparations for a new semiconductor strategy to be adopted by 2026.

The Commission appears to be progressing on the second front. A new legislative proposal – the Chips Act 2.0 – is expected by summer 2026. Already, Member States and European semiconductor firms are positioning themselves to actively shape this critical debate.

Now is therefore a pivotal moment to reflect on the strategic framework that should guide Europe's upcoming decisions in this domain. This conversation demands greater clarity around the limits of the concept of "strategic autonomy." This paper argues that strategic autonomy is not a particularly useful framework for shaping future policy in the European semiconductor sector. More effective policy measures are certainly required to ensure sustained access to semiconductor technology for Europe's critical economic sectors amid geopolitical risks. The European semiconductor industry itself needs an improved policy environment to thrive. But strategic autonomy is divisive, largely aspirational, and creates misunderstandings that are hard to dispel. Interdependence will continue to define the global semiconductor landscape, even with

inevitable new trade barriers between China on the one hand, Japan, Taiwan, South Korea, America and Europe on the other. A more practical and grounded approach is offered by the EU's June 2023 Economic Security Strategy, which sets out "a comprehensive strategic approach to economic security, de-risking, and promoting [Europe's] technological edge in critical sectors".[3] This framework provides a clearer path forward, focused on the two issues that matter most: resilience and competitiveness.

Strategic autonomy and the semiconductor sector

Strategic autonomy has long been a contentious concept in Europe. It is still often caricatured as an unrealistic attempt to promote a Europe independent of the United States in matters of defence. This vision, largely associated with French strategic thinking, has struggled to gain support among Eastern European countries, which are directly exposed to the threat of Russian imperialism. The bluntest and most pointed criticism of this approach came from former German defence minister Annegret Kramp-Karrenbauer, who stated: "Illusions of European strategic autonomy must come to an end: Europeans will not be able to replace America's crucial role as a security provider".[4]

In 2025 however, growing uncertainty about the future of American commitment to European security and to NATO has prompted renewed reflection on the relevance of strategic autonomy as a guiding framework for policymaking in critical sectors. Germany's new chancellor, Friedrich Merz, has declared that his "absolute priority" is "to strengthen Europe as quickly as possible so that, step by step, we can really achieve independence from the USA". [5] In parallel, the European Union has launched new initiatives to ramp up arms production within Europe and is seemingly shifting decisively toward "European preference" policies in public procurement to favor production on European soil. In practice, many elements associated with strategic autonomy, at least as understood by its advocates, are increasingly being implemented across the EU.

To be clear, the term "strategic autonomy" does not appear in the 2022 EU Chips Act, nor is it explicitly invoked by the European Commission's leadership as a guiding principle for industrial policy in the semiconductor sector. President Ursula von der Leyen, in her major strategic speeches, from her annual State of the Union addresses to her 2024 programmatic speech before the European Parliament to present the new College of Commissioners, avoids using the term altogether. Yet many of the themes she highlights as priorities, particularly in the context of the EU's economic security agenda, are frequently interpreted as key components of what is broadly understood to be strategic autonomy.

For instance, when she warns that "overdependencies can quickly turn into

vulnerabilities. This is why stable and secure supply chains are so vital. Critical raw materials are the most obvious example. The demand for critical minerals for the clean transition has already doubled during the last mandate, and it could triple by the end of the next one. So we need free and fair trade to diversify our suppliers," she clearly touches on ideas central to the concept of strategic autonomy—yet she deliberately refrains from using the term itself, assumedly because it is divisive and creates misunderstandings and distrust in the transatlantic partnership.[6]

In its formal communications, the European Commission occasionally refers to strategic autonomy in connection with the Chips Act. One justification for the Act notes that "security of supply of semiconductors must be ensured to enhance the Union's strategic autonomy". [7] This reflects the fact that the broader policy debate around semiconductors in Europe often links industrial policy tools to the overarching goal of achieving greater strategic autonomy.

This linkage is evident, for example, in the Semiconductor Coalition launched in March 2025 by Austria, Belgium, Finland, France, Germany, Italy, Poland, Spain, and the Netherlands. In a joint statement, the coalition asserted: "to ensure technological sovereignty, resilience and strategic autonomy, the EU must strongly enhance its cooperation – between governments, industry, research institutions – and jointly create and coordinate a common strategy to increase production capacity, invest in cutting-edge research, and develop a skilled workforce".[8]

The concept of strategic autonomy originated in EU defence discourse, particularly in the context of the Common Security and Defence Policy (CSDP). The term first appeared in the 2013 conclusions of the European Council on CSDP, which emphasized the need to strengthen Europe's defence technological and industrial base.[9] It became more prominent in the 2016 EU Global Strategy, a security- and defence-oriented document that positioned strategic autonomy as a central ambition of the Union. In defence, the concept has generally focused on reducing reliance on NATO, enhancing European operational readiness, improving the interoperability of European forces, and increasing the share of European products in defence procurement at the expense of US weapons systems.

Over time, however, the meaning of strategic autonomy has broadened. Scholars like Nathalie Tocci and Sven Biscop have framed strategic autonomy beyond military policy, as a "general mindset" that should determine policymaking across the board, or as the EU's capacity to act independently in key areas, without reliance on the U.S. or any other global powers.[10]

The concept gained further traction in the wake of the COVID-19 pandemic, which exposed vulnerabilities in global supply chains; the shift in U.S. trade and technology policy that began under the first Trump administration, and the Russian invasion of Ukraine, which forced Europe to confront its dependencies in the energy sector. These events catalysed the expansion of strategic autonomy discourse into areas such as economic resilience, industrial policy, and digital sovereignty. Recent efforts to reduce dependence on Russian energy, most notably through the RePowerEU initiative, are often cited as a successful example of Europe asserting strategic autonomy.

Yet the EU Chips Act does not frame its goals in these terms. Instead, it emphasizes enhancing Europe's competitiveness and resilience in semiconductor technologies and applications. On the resilience front, the Act seeks to respond to the supply chain fragilities revealed by the COVID-19 pandemic, which severely affected critical sectors like automotive and healthcare. For example, the EU automotive sector saw a 23% decline in output in 2021 compared to 2019.[11] In terms of competitiveness, the Act aims to reinforce Europe's leadership in specific parts of the semiconductor value chain, including power electronics, equipment manufacturing, and R&D. Its first pillar provides enhanced support for European innovation through direct financial support for pilot lines and facilitated access to capital for start-ups.[12]

This approach is consistent with the EU's Economic Security Strategy, adopted in June 2023, which provides a concrete and pragmatic framework focused on problem-solving. The strategy outlines four priority areas for public action, each highly relevant to the semiconductor sector:

- **Managing technology leakage:** This remains a persistent challenge, despite considerable progress in the last five years. The EU has modernized its export control regimes, established a bloc-wide foreign direct investment (FDI) screening mechanism, and is now moving to prioritize research security. Semiconductors have been at the heart of this effort. Europe is a target for technology theft and opportunistic acquisitions, particularly because of its vibrant start-up ecosystem and world-leading research institutions such as CEA-LETI, IMEC, and Fraunhofer. Effective management of technology transfers is essential to both resilience and competitiveness goals.

- **Protecting critical infrastructure:** Semiconductors are central to Europe's digital infrastructure, including upcoming 6G rollouts and AI server deployment. These developments present an opportunity to introduce procurement policies that favor European suppliers. On the defensive side, Europe must reduce its excessive reliance on foreign firms for both semiconductor components and the raw materials they require.

- **Securing supply chains:** This is arguably the least developed aspect of the economic security toolbox. The risks highlighted by the COVID-19 pandemic remain largely unaddressed at the systemic level. There are many examples of private companies taking steps to review their supply chain vulnerabilities and restructuring their network of suppliers, but it has been hard for European institutions to assert a helpful role for themselves besides flagging the importance of the issue in the public debate.

- **Responding to the weaponization of interdependence and coercion:** In today's geopolitical landscape, the use of economic statecraft for strategic leverage is commonplace. The European semiconductor ecosystem is exposed to export control decisions made in Washington and Beijing – decisions it has little ability to influence. It is also increasingly subject to the use of extraterritorial legislation aimed at enforcing national technology policies. What was once a challenge primarily within transatlantic relations is now emerging as a growing concern in EU-China relations as well.[13]

In sum, the EU's goals of ensuring resilience and competitiveness are extremely dependent on the international environment. The 2023 economic security agenda offers a clear and actionable framework for strengthening the European semiconductor ecosystem. The key question is which policy areas should be prioritized to deliver tangible progress on resilience and competitiveness?

The European semiconductor ecosystem:

challenges to resilience and competitiveness

The European semiconductor ecosystem is exposed to a wide range of threats that can undermine its resilience and competitiveness. These risks can be grouped into three main categories:

Geopolitical risk concerns mainly the international security environment. Industry insiders describe a Taiwan Strait war or a major clash on the Korean peninsula as a risk of "nuclear magnitude" for their business. Maritime trade disruptions or threats to air travel in the South China Sea, the Taiwan Strait or the Red Sea are high-cost events as well, although maritime is less relevant than air for chips as most are shipped by air. For the European private sector, geopolitical risk can be compared to California's limited preparedness for seismic threats in comparison with Japan, where numerous measures are in place to strengthen national resilience against future disasters. In this sense, security risks in East Asia are too often viewed more as externalities beyond the control of the private sector than as structural factors shaping the strategic positioning of companies in the industry. At the public policy level, geopolitical risk has not been decisively integrated in decision-making.

Geo-economic risk is chiefly driven by the strategic rivalry between the United States and China, manifesting itself in the weaponization of global value chains. This includes trade restrictions, export controls, limitations on technology transfers, extraterritorial legal actions, and market distortions fuelled by techno-nationalist industrial policies. Among European businesses, awareness of these risks and on the quasi certitude of further escalation in the short term is acute. The EU is comparatively better equipped to respond, thanks to the strength of the Single Market, provided its full potential can is better leveraged.

Economic risk stems largely from intra-European dynamics, some of which are influenced by broader geo-economic trends. The structure of European industry plays a crucial role in shaping the semiconductor sector, as industry is its primary customer. Consequently, the future of Europe's semiconductor ecosystem will be closely tied to the trajectory of key sectors such as automotive, aerospace, healthcare, and defence, as well as the pace of the continent's digital and green transitions. Similarly, the strength and operational scale of Europe's financial sector are critical enablers of semiconductor growth. Finally, talent shortages are consistently identified by industry leaders as the most immediate threat. According to the industry association ESIA, the European

semiconductor ecosystem could face a shortfall of up to 350,000 skilled workers by 2030.[14] Effectively managing these three categories of risks is crucial to achieving Europe's objectives of resilience and competitiveness. To this end, Pillar III of the Chips Act established a monitoring mechanism designed to provide the European Commission, working alongside a Semiconductor Board made up of representatives from all 27 Member States and with critical industry input, with real-time insights into key value chain developments to guide policy decisions. However, as of spring 2025, this mechanism is not yet fully operational. Reluctance to share sensitive information has consistently plagued the initiative, despite a shared recognition among all stakeholders that stronger economic intelligence is essential, and that the EU level is best positioned to assemble the comprehensive strategic overview they all need. A fundamental rethink of strategic risk management in Europe is therefore urgently needed.

Towards more effective risk management for Europe's resilience and competitiveness:

an economic security framework

The 2022 EU Chips Act may come to be seen as a landmark in the evolution of European industrial policy. Yet its most enduring legacy could lie not in its outcomes, limited as they are in terms of added manufacturing capacity, but rather from the political shift it signaled: the acceptance of state aid by Member States as a legitimate tool for industrial revitalization. By easing longstanding EU competition rules, the Act enabled Member States to move beyond a narrow focus on R&D and pursue a more active industrial policy. However, this policy shift has failed to address the core challenge: the persistent lack of capital at the scale required for Europe's re-industrialization. The 2024 Draghi report on competitiveness articulates these shortcomings with great clarity and recommends the adoption of an EU semiconductor budget and new fast-track instruments to facilitate policy support.[15] The EU has approved two "Important Projects of European Common Interest" (IPCEI) for microelectronics in 2018 and 2023. IPCEIs essentially authorize Member States to provide state aid not for manufacturing, but for industrial prototyping of innovation. Together, those two IPCEIs have attracted close to €10 billion from national governments.[16] Companies, however, complain about excessive bureaucratic requirements that slow down the process, and prevent smaller companies from accessing the scheme.

Build an A.I hardware ecosystem on European soil

Europe remains almost entirely absent from the global production of advanced logic chips—a market increasingly shaped by the needs of artificial intelligence and dominated by TSMC in advanced manufacturing and packaging, and SK Hynix in High Bandwidth Memory. The launch of production on the Intel 4 process technology in Leixlip, Ireland, last September is a welcome development which creates a market for EUV in Europe and brings 7 nm closer to European customers, but it does not solve Europe's problems of extreme reliance on imports and relatively poor logic chip ecosystem by comparison with East Asia and the United States. Unless disrupted by a conflict in the Taiwan Strait, TSMC's dominance is expected to persist through 2030. Despite high-profile investments in the United States, Taiwan will continue to serve as TSMC's industrial stronghold. Even if all planned U.S. fabs are completed, they will represent only around 20% of the company's advanced capacity by the end of the decade. Taiwan's technological lead is set to widen further in 2025, as mass production of 2-nanometer chips begins in Hsinchu, Tainan, and Kaohsiung. This new node offers a 10–15% improvement in speed and energy efficiency over the 3-nanometer generation—and order books are already full.[17]

Unlike in the United States, Japan, China, and South Korea, all of which are, in different ways, following TSMC's lead, investing in advanced logic chip manufacturing has been a contentious issue in Europe over the past four years. European companies have strongly opposed former Commissioner Thierry Breton's push for "2 nm production" within the EU, arguing that limited public funding should prioritize European firms and that the European market for such advanced chips remains marginal. In contrast, Japan has pursued a markedly different path by investing heavily in Rapidus—a next-generation semiconductor venture launched in 2022 and a cornerstone of Japan's strategy to rebuild domestic capabilities in cutting-edge chip production. By bypassing Fin Field Effect Transistor (FinFET) technology and moving directly to 2-nanometer (nm) and sub-2nm nodes using Gate-All-Around (GAA) architecture, Rapidus seeks to establish itself as a global leader in high-performance computing semiconductors. What sets Japan's approach apart from Europe is its prioritization of national security concerns. Rapidus is envisioned not only as critical infrastructure for Japan's digital economy, but also as a strategic asset in the country's pursuit of technological superiority over China. In addition, despite the many doubts regarding the commercial viability of Rapidus, owning a national technology capacity on Japanese soil is seen as an insurance against possible geopolitical disruptions in East Asia.

As part of the EU's High-Performance Computing Joint Undertaking, seven A.I factories are currently being built in Finland, Germany, Greece, Italy, Luxembourg, Spain and Sweden.[18] France and the United Arab Emirates have recently announced an investment exceeding €30 billion on a 1GW AI data center and related facilities.[19] Recognizing AI servers as critical infrastructure is an important step to accept the need for a

European manufacturing capacity of advanced logic chips. Europe needs to move beyond the failure of the Intel project. Intel initially planned to produce 2-nanometer chips at a new mega-fab in Magdeburg, Germany, with substantial support from the German government. The project, announced in 2022, was positioned as a cornerstone of Europe's push to regain ground in advanced semiconductor manufacturing. However, escalating costs and shifting market conditions led Intel to revise its plans. While the German government ultimately increased its financial support to nearly €10 billion, Intel delayed construction and scaled back its ambitions, refocusing instead on more mature nodes.

The shift underscores the difficulty of establishing cutting-edge logic production in Europe, even with strong political backing. With TSMC focused on expanding production in Taiwan and the United States, Europe's options are narrow. Strategic cooperation with Japan's Rapidus, or the creation of a similar entrepreneurial venture built from the ground up, warrants serious consideration, although Rapidus' challenges in yield and attracting customers should be considered.[20] A 2-nanometer fab in Europe would serve as a cornerstone for a virtuous ecosystem, benefiting suppliers, customers, and researchers alike. Strategically, it is more essential than ever.

Cultivate areas of indispensability

Indispensability is sometimes discussed in Europe as an alternative to autonomy for managing external dependencies. Instead of pursuing self-sufficiency across all segments of the semiconductor value chain, this approach relies on deterrence through the ability to retaliate—by being irreplaceable in critical technologies. Europe's clearest example of indispensability is ASML's dominance in lithography, particularly in Extreme Ultraviolet (EUV) technology, which is essential for producing advanced logic nodes and remains a global monopoly. ASML's indispensability has already been weaponized in the geopolitical contest between the United States and China, but in theory, still provides a line of defense against hostile supply chain disruption against which Europe could retaliate by limiting or cutting access to ASML's technology. Europe thus has a strategic interest in preserving ASML's monopoly in EUV, especially as competition could emerge from China, and is already present from Japanese companies.

No other segment of the semiconductor value chain is monopolized by a European company. However, the research excellence of institutions like CEA-LETI, Fraunhofer, and IMEC constitutes a form of strategic indispensability that must be better recognized and nurtured. This calls for stronger research security measures and expanded tax incentives to safeguard and enhance their contribution. European R&D is particularly well positioned to lead in improving the energy efficiency of AI servers—an area of growing strategic importance that deserves sustained investment and protection.

Facilitate access to capital at the right scale

The Chips Act has allocated limited EU budget to semiconductor projects. The Commission's funding through the Horizon Europe and Digital Europe Program funds totalled around €4.5 billion, and are strictly targeting R&D and innovation, not manufacturing capacity. By comparison, the total investment of TSMC, Samsung and Intel over the 2020-2023 period was close to €250 billion.[21] The possible levers to unlock access to capital in Europe are well identified already. They include:

- Develop the European Capital Markets Union to unlock greater private financing at scale.
- Relax competition rules to support the emergence of European industrial champions, coupled with procurement policies that prioritize European suppliers.
- Facilitate the creation of a unified European telecom market to increase scale and capitalization among mobile network operators.
- Leverage public procurement, particularly within the defense sector. Although defense accounts for less than 1% of Europe's semiconductor consumption, a strengthened arms industry can drive capacity growth in semiconductor segments requiring stringent security measures—especially packaging.
- Increase the volume of European research funding in the forthcoming EU multiannual financial framework, slated for negotiation in 2027.

Address workforce and innovation gaps by focusing policy support on existing industrial clusters

Multiple factors contribute to the talent shortage in Europe's semiconductor sector: uncompetitive compensation, a broader crisis in engineering and microelectronics careers, with software often favoured over hardware, declining vocational interest, low public awareness of the industry, and the difficulty of addressing workforce challenges at the European level due to national or even local competencies. Training engineers and technicians takes three to five years, not including the need for continuous upskilling in a fast-evolving technological landscape. While advances in manufacturing automation may ease Europe's conundrum, the underlying challenge is unlikely to disappear. Tackling this issue requires greater coordination of education and training policies across member states, improved public communication about the sector's appeal, stronger branding by regional clusters to attract talent, increased reliance on corporate-led lifelong learning, and a more proactive approach to attracting foreign professionals, an area where the Netherlands offers a model, with 90% of engineers in photonics coming from abroad.[22] Focusing policy support on regional clusters, rather than dispersing it across all 27 Member States, may be anathema to the European Commission's tradition and require new adjustments to the EU's competition law, but it is the most pragmatic and effective way to deliver results.

Don't abandon mature nodes

In 2024, 74% of the aggregated European demand for semiconductors was for 65-90 nm nodes, while less than 3% was for nodes under 7 nm..[23] The European demand for such legacy chips is projected to continue growing as they are essential to cleantech adoption and advanced

manufacturing industries. European consumption increasingly relies on imports from China, already at 30% in 2023, as China continues to rapidly increase manufacturing capacity for those nodes.[24] By 2025, state-subsidized overcapacity is already pushing prices downward, raising serious concerns about a repeat of the solar panel scenario—a wave of cheap imports that undermine European producers. Addressing this challenge will likely require trade defence measures, potentially including anti-subsidy actions. While the Trump administration appears determined to confront the issue head-on, the European Union has yet to articulate a clear position on the matter at the time of writing.

Integrate semiconductor in a European foreign economic policy focusing on strategic partnerships

Semiconductor issues need to be better integrated in European foreign economic policy. Three areas should be prioritized:

- On the defensive side, Europe needs partners on export control issues and trade. There are three distinct aspects.
  - First, Europe needs to negotiate diplomatically priority access to critical semiconductors for its strategic sectors such as defence, energy, and healthcare to reduce risk of supply crunch during crises. This can be done through exploring partnerships with key Asian industrial players (India, Japan, Malaysia, Singapore, South Korea, Taiwan, Vietnam).
  - Second, Europe must pursue the broadest possible alignment with external partners, including the U.S. and Japan, on technology transfer controls. This includes export controls, foreign direct investment (FDI) screening, and research security—areas where the initiative has so far consistently come from the United States. Once the semiconductor risk assessment mandated by the European Commission is completed, likely in the course of 2025, the EU

should develop a coordinated foreign policy outreach based on its updated list of risks.

- Third, a policy of non-price criteria on the demand side, to absorb the cost of industrial policies, can only be effective if it is well coordinated with partners. The most appropriate Forum to start is the G7.

- Exchange of information regarding supply chain bottlenecks and disruption risks already take place within the framework of the EU-Japan and the EU-Korea digital partnerships. They used to take place as part of the semiconductor working group of the UE-EU Trade and Technology Council, but the Trump administration shows no interest to keep the TTC alive. A new framework is needed with the US. Targeted economic intelligence partnerships with non-EU countries such as Japan, the UK, and possibly Taiwan, aligned with the specific needs of semiconductor supply chain monitoring, are an option to consider seriously. Economic intelligence cooperation would facilitate due diligence investigations related to technology transfers (such as screening FDI transaction and determining the end-user of a commercial transaction). The pooling of information resources on supply chain vulnerabilities would be in the European interest as well.

Conclusion

The term strategic autonomy does not offer an operational framework for the semiconductor sector. It may be aspirational but it is misleading, because it suggests self-sufficiency and can be misinterpreted as seeking the end of the transatlantic alliance, even if this is not the intention of its main proponents. The EU Chips Act, despite being positioned by some as a tool for European technological sovereignty, does not adopt the language or logic of strategic autonomy. Nor does President von der Leyen invoke the term in her key policy communications. This inconsistency deepens the ambiguity surrounding a concept that is already ill-defined and excessively politicized.

For stakeholders across the semiconductor value chain, the more actionable policy lens is the EU's Economic Security Strategy. Strategic autonomy is likely to remain salient in the political discourse but is unlikely to create a pan-European consensus. By contrast, economic security is the real operational agenda. Policy and industry alignment around this framework is critical as Europe prepares for a new semiconductor strategy cycle in 2026. The Draghi report and the Chips Act evaluation of the European Court of Auditors have paved the way for acting. To move from intention to execution, the EU semiconductor ecosystem, including industrial and financial firms, Member States, and RTO should reframe strategic debates around resilience, competitiveness, and risk management, and focus squarely on the "how" to operationalize these goals.

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