

Balancing Innovation and Sovereignty: The Role of FDI Screening and FSR in Shaping Strategic Technologies

by Francesco Giovanni Lizzi

No 08/2025

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CELIS Non-Paper 08/2025

CFIS 25 Panel 3

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1. Introduction

Strategic technologies such as semiconductors, artificial intelligence (AI), quantum computing, and biotechnology are foundational to both European economic competitiveness and national security. As geopolitical tensions intensify and control over sensitive technologies becomes increasingly critical, the EU faces mounting pressure to monitor and safeguard the ownership of these assets. The concept of open strategic autonomy has become central to EU policy discourse, reflecting the ambition to reduce dependencies in critical areas while remaining engaged in global trade and innovation networks.¹ Achieving this balance requires nuanced policies that support technological leadership without compromising openness. This background paper for the upcoming CFIS 25 explores the role of FDI screening and foreign subsidies regulations as key components of the European regulatory approach to strategic sovereignty. It provides an overview intended to facilitate discussion on the regulatory, economic, and political dimensions of this challenge.

¹ Kroll, H. (2024). *Assessing Open Strategic Autonomy: A two-dimensional index to quantify EU-27 autonomy in industrial ecosystems and strategic technologies.* JRC External Study Report. https://iri.jrc.ec.europa.eu/sites/default/files/2024-01/JRC136359_RD_OSA_JRC136359_final.pdf

2. EU Investment and Subsidies Regulation Landscape

2.1. FDI Screening Regulation

Regulation (EU) 2019/452 established a framework for Member States and the EU Commission to coordinate on foreign direct investments that may affect security or public order. It applies primarily to sectors involving critical infrastructure, sensitive technologies, and access to sensitive data.² The latest EU FDI data from 2023 shared by the EU Commission shows that nearly half of the FDI inflows in the EU27 targeted ICT and manufacturing sectors.³ While the sensitivity of ICT is undisputable⁴ the relevance of manufacturing might appear secondary. However, it plays an essential role as it also includes high-tech manufacturing.⁵ The lion's share of high-tech manufacturing investment in the EU stemmed from the United States, despite US investment in high-tech sectors declining more sharply in 2023 than in low-tech sectors compared to previous years.⁶ Sensitive technologies play therefore an important role in the EU FDI inflows, thus making the effectiveness of FDI screenings essential. In fact, sector-wise, ICT and manufacturing figured among the two top sectors with the most FDI notifications in 2023⁷. The sensitivity of these cases also reverberated in how these cases were dealt with. In total, the EU Commission handled 488 cases over 2023, 92% of which were concluded at Phase 1.⁸ During this period, other Member States that consider that the notified FDI is likely to affect their security or public order can reserve the right to provide comments and ask questions.⁹ Phase 2, when other Member States and the EU Commission may request that the State undertaking the screening provides additional information, involved especially manufacturing and ICT, accounting for 39% and 24% of Phase 2 reviews respectively. Looking into the notifications related to critical technologies subject to Phase 2 in

² Regulation (EU) 2019/452 of the European Parliament and of the Council of 19 March 2019 establishing a framework for the screening of foreign direct investments into the Union, OJ L 79I, 21.3.2019

³ European Commission (2024) Report from the Commission to the European Parliament and the Council. Fourth Annual Report on The Screening of Foreign Direct Investments into the Union.

⁴ Erixon, F., Guinea, O., & Pandya, D. (2024, December). *Securing Europe's Future: Strengthening ICT Competitiveness for Economic and National Security*. <https://ecipe.org/publications/eu-ict-competitiveness-for-economic-national-security/>

⁵ The EU Commission provides an overview of the factors that are used to assess the criticality of the manufacturing sector transactions in respect to security and public order. The factor used most often is when the transaction involved investment in critical technologies, accounting for 51% of the total of the FDIs screened in 2023. The second most important factor was when the transaction involved investment in critical infrastructure with 34% followed by supply of critical inputs with 13%. Finally, access to sensitive information (including personal data) accounted for only 2% of the total. See: Fourth Annual Report on The Screening of Foreign Direct Investments into the Union.

⁶ European Commission (2024). Commission Staff Working Document: Screening of FDI into the Union and its Member States.

⁷ Fourth Annual Report on The Screening of Foreign Direct Investments into the Union, *op.cit.*

⁸ *ibid*

⁹ Fountoukakos, K., Puech-Baron, C., Forde, A., & O'Connell, K. (n.d.). *European Union: Key 2024 developments set the stage for pivotal era for merger control*. Retrieved 7 August 2025, from <https://globalcompetitionreview.com/review/europe-middle-east-and-africa-antitrust-review/2026/article/european-union-key-2024-developments-set-the-stage-pivotal-era-merger-control>

more detail, Defence related activities accounted for 26% of these cases, followed by Aerospace with 22% and Semiconductors with 17%. The remaining other critical technologies accounted for 35% of the total. These included cybersecurity, artificial intelligence, nuclear technologies, bio and nanotechnologies.¹⁰

This trend shows how sensitive sectors are no longer limited to the traditional sectors associated with national security at a macro level (defence, energy or telecoms), but are now expanding to a number of high-tech sectors centred around advanced semiconductors, AI, quantum computing, biotechnologies, and advanced connectivity.¹¹ On these bases, the main revision adopted by the EU Commission to strengthen its FDI screening measures is dated January 2024. The EU Commission proposed revising the FDI Screening Regulation to address identified gaps, and proposed changes include mandatory screening across all Member States, a harmonized minimum sectoral scope, and procedural improvements to enhance accountability and streamline the cooperation mechanism.¹² The EU Commission has also signalled a greater readiness to scrutinise acquisitions that may not create immediate overlaps but could reshape market dynamics or weaken future competitive pressure.¹³ The ongoing revision process reflects the EU's awareness of the growing interlinkage between economic competitiveness and strategic autonomy.

While the Regulation 2019/452 and its proposed updates establish a cooperation mechanism for information exchange and coordinated review between the EU Commission and the Members States, the final decision to block or approve an investment remains at the national level. Therefore, fragmentation persists, creating coordination challenges and uneven levels of protection across the EU. As of June 2025, Croatia, Cyprus, and Greece are in various stages of legislating and enacting their national screening regimes, with Greece expected to finalize implementation shortly.¹⁴ It is therefore not surprising that in late 2024 EU member countries debated removing a list of critical technologies from the scope of FDI screening. A draft negotiated under the Hungarian presidency removed earlier lists of critical sectors, potentially narrowing the scope of transactions subject to review.¹⁵ This signals a lack

¹⁰ Fourth Annual Report on the Screening of Foreign Direct Investments into the Union, *op.cit.*

¹¹ European Commission (2023). Annex to the Commission Recommendation on critical technology areas for the EU's economic security for further risk assessment with Member States. https://defence-industry-space.ec.europa.eu/system/files/2023-10/C_2023_6689_1_EN_annexe_akte_autonome_part1_v9.pdf

¹² European Commission (2024). Commission proposes new initiatives to strengthen economic security. https://ec.europa.eu/commission/presscorner/detail/en/ip_24_363

¹³ Fountoukakos, K. et al., *op.cit.*

¹⁴ De Volder, S., Young, P., Klein, N., & Haans, J. (n.d.). *Revised EU FDI Screening Regulation's direction of motion following the European Parliament's review.* DLA Piper. Retrieved 7 August 2025, from <https://www.dlapiper.com/en/insights/publications/2025/06/revised-eu-fdi-screening-regulations-direction-of-motion-following-the-european-parliaments-review>

¹⁵ Gjis, C. (2024, November 26). *EU capitals try to gut investment screening rules aimed at keeping China out.* POLITICO. <https://www.politico.eu/article/eu-capitals-fdi-screening-rules-china/>

of alignment between Member States and the EU Commission, undermining unified strategic objectives. Despite the converging views as to what sectors are considered critical, the exact definition of critical activities may differ greatly between Member States, for example, whether only the production of the semiconductor value chain is covered, or also the required equipment, input materials or chip design.¹⁶ In this sense, the guidance of the EU Commission is limited to the Recommendation of 3 October 2023 on critical technology areas for the EU's economic security for further risk assessment with Member States, which identified as especially critical semiconductors, AI, quantum technology and biotech.¹⁷ Some additional guidelines are offered by the Observatory of Critical Technologies (OCT), co-led by DG DEFIS and DG JRC, which monitors and analyses critical technologies related developments and supply chains of space and defence. According to OCT, a technology is defined critical if it is characterised by a strategic dependency (no EU source is available), and if it is essential for space, security and has multi-use applications.¹⁸ At the beginning of 2024, the observatory delivered a classified report of its findings to member states. However, representatives from the EU Commission's Expert Group on the Economic and Societal Impact of Research and Innovation lamented a lack of both transparency and command and control.¹⁹

This uncertainty behind a clear definition of what is critical technology makes the regulatory environment complex and raffles investment decisions. These concerns are also shared by Digital Europe, the main trade association representing digitally transforming industries in Europe. Their take on the EU Economic and Security Strategy is that it prioritises measures aimed at reactive protection rather than promotion of industry competitiveness possibly leading to retaliation. Furthermore, they contend that such measures are not suitable for European innovation and may jeopardize EU ability to expand to key global markets.²⁰

¹⁶ Berg, O., Wienke, T.-M., Kelliher, K., Sensenig, T., & Roussier, L. (2025, March 27). *Foreign direct investment reviews 2025: European Union / White & Case LLP*. <https://www.whitecase.com/insight-our-thinking/foreign-direct-investment-reviews-2025-european-union>

¹⁷ European Commission. (2023). Commission Recommendation of 03 October 2023 on critical technology areas for the EU's economic security for further risk assessment with Member States. https://defence-industry-space.ec.europa.eu/commission-recommendation-03-october-2023-critical-technology-areas-eus-economic-security-further_en

¹⁸ The EU Observatory of Critical Technologies—Defence Industry and Space. https://defence-industry-space.ec.europa.eu/eu-space/eu-observatory-critical-technologies_en

¹⁹ Matthews, D. (2025, January 9). The EU needs 'radically' better technology intelligence, its advisers warn | Science Business. <https://sciencebusiness.net/news/eu-needs-radically-better-technology-intelligence-its-advisers-warn>

²⁰ The EU's Critical Tech Gap: Rethinking economic security to put Europe back on the map. (2024). DIGITALEUROPE. <https://www.digitaleurope.org/resources/the-eus-critical-tech-gap-rethinking-economic-security-to-put-europe-back-on-the-map/>

2.2. Foreign Subsidies Regulation (FSR) and additional tools

The EU FDI screening Regulation is part of a broader toolkit in the realm of the European economic security strategy, published in May 2023. Among these, the Foreign Subsidy Regulation (FSR), the Anti-Coercion Instrument (ACI), Important Projects of Common European Interest (IPCEIs) and the 5G toolbox are also part of this picture. These instruments collectively aim to strengthen Europe's resilience and reduce exposure to coercive practices.²¹

Adopted in December 2022 and in force since early 2023, the FSR targets distortions caused by non-EU state subsidies. It introduces notification thresholds for M&A and public procurement and empowers the EU Commission to investigate and impose remedies if subsidies distort competition. The FSR includes three mechanisms: notification of concentrations involving foreign subsidies above €50 million when the EU turnover exceeds €500 million; notification of public procurement bids involving subsidies over €4 million for contracts valued above €250 million; ex officio investigations in all other cases. By mid-2024, 100 days after the start of application of the notification obligation, the EU Commission services (DG Competition in this case) have received case team allocation requests and engaged in pre-notification talks with the notifying parties in 53 cases, 5 covering a large set of sectors, ranging from basic industries to fashion retail and high technologies.²² Beyond competition and coercion, the FSR reflects the growing alignment between trade, industrial, and security policies. The key issues revolving around the FSR, as also highlighted in the last CELIS Forum on Investment Screening, are the administrative and burden compliance, impact on competition and industry dynamics, and long-term economic and strategic implications.²³ In fact, companies face challenges in collecting and reporting the data required by the EU Commission, especially when dealing with complex foreign financial contributions across multiple jurisdictions. The FSR may also reduce the number of suppliers available, thus having an impact on procurement costs. Simultaneously, FSR can support EU goals for strategic autonomy and economic resilience.²⁴

On the same note, Regulation 2023/2675 on the protection of the European Union and its Member States from economic coercion (the Anti-Coercion Instrument, ACI)

²¹ European Commission (2023, June 20). Joint Communication to the European Parliament, the European Council and the Council on "European Economic Security Strategy". <https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=JOIN:2023:20:FIN>

²² Moscoso L., Stoyanova I. (2024). The Foreign Subsidies Regulation – 100 days since the start of the notification obligation for concentrations, Competition FSR Brief No 1/2024, ISBN 978-92-68-12950-0, ISSN: 2812-0485, available at: https://competition-policy.ec.europa.eu/document/download/22197012-2036-4b1e-8b02-0eb8b2d6e666_en?filename=kdar24001enn_competition_FSR_brief_1_2024_100-days-of-FSR-notification-obligation.pdf.

²³ See Pietkun, D. (2024). The EU Foreign Subsidies Regulation. CELIS Non-Papers on Economic Security

²⁴ *ibid*

enables the EU to take action in cases of economic coercion of the EU or its Member States by non-EU countries.²⁵ The objective is to deter coercion, and if necessary, to respond to it. Under the ACI, economic coercion refers to a situation whereby a third country seeks to pressure the European Union or an EU Member State into making a particular choice by applying, or threatening to apply, measures affecting trade or investment. Under the ACI, the EU Commission would initiate proceedings to determine whether a third country measure could be considered to be economic coercion as understood under the ACI's terms. Were coercion then identified, the EU Commission would submit a proposal to the EU Council for an implementing act, which would be adopted and amended by the Member States under the EU qualified majority voting rules. In this way, the Member States retain control over the use of the ACI.²⁶ Considering the recently imposed US tariffs on the EU, some observers have wondered how the EU could make use of the ACI. As it would require 15 of 27 EU members to approve, the use of ACI appears difficult as it would also take around eight weeks of preparation and consultations before being used.²⁷ Furthermore, it would be costly for Europe to close the door on US tech, not to mention American pharmaceuticals and financial services. Europe has no easy substitutes for Amazon, Google, or Microsoft cloud computing. These three leading global cloud providers now account for 70% of the regional market while Europe's largest cloud provider holds a mere 2% share.²⁸ This degree of dependence highlights a structural tension between pursuing strategic autonomy and relying on US-based providers. The main EU alternative to address this issue is Gaia-X. The initiative was designed as a federated cloud infrastructure built on shared European standards. While it had some success in establishing a collaborative framework to reduce the EU market fragmentation, its reliance on non-European components has raised a few eyebrows about its role in achieving digital sovereignty.²⁹ The new Important Project of Common European Interest on Next-Generation Cloud Infrastructure and Services has the potential to build on the potential of Gaia-X with a clearer focus on EU strategic autonomy. Focused on open-source innovation, it aims to create the first interoperable, openly accessible cloud-edge computing continuum in Europe.³⁰

²⁵ Regulation (EU) 2023/2675 of the European Parliament and of the Council of 22 November 2023 on the protection of the Union and its Member States from economic coercion by third countries. PE/34/2023/REV/1. OJ L, 2023/2675, 7.12.2023, ELI: <http://data.europa.eu/eli/reg/2023/2675/oj>

²⁶ *The Anti-Coercion Instrument: What Is It and How Europe Might Use It Over the Next Four Years*. (2025, April 2). Crowell & Moring - The Anti-Coercion Instrument: What Is It and How Europe Might Use It Over the Next Four Years. <https://www.crowell.com/en/insights/client-alerts/the-anti-coercion-instrument-what-is-it-and-how-europe-might-use-it-over-the-next-four-years>

²⁷ Echikson, W. (2025, April 11). Europe's Tech Dilemma: An Olive Branch or a Bazooka. CEPA. <https://cepa.org/article/europees-tech-dilemma-an-olive-branch-or-a-bazooka/>

²⁸ European Cloud Providers' Local Market Share Now Holds Steady at 15% | Synergy Research Group. (2025). <https://www.srgresearch.com/articles/european-cloud-providers-local-market-share-now-holds-steady-at-15>

²⁹ Bria, F., Timmers, P., & Gernone, F. (2025, February 13). EuroStack – A European alternative for digital sovereignty. CEPS. <https://www.ceps.eu/ceps-publications/eurostack-a-european-alternative-for-digital-sovereignty/>

³⁰ *Ibid*

In the telecommunication realm, the 5G toolbox lays out instead a range of security measures based on the EU coordinated risk assessment of 5G network security, aiming to mitigate risks effectively and ensure secure 5G networks are deployed across Europe. It sets out detailed mitigation plans for each of the identified risks and recommends a set of key strategic and technical measures which should be taken by all Member States and/or by the EU Commission.³¹

All things considered, the EU current approach to economic security in critical sectors reflects a wider global trend toward economic statecraft, where investment flows are assessed not just on market impact, but on strategic intent. This broader lens is necessary to detect subtle shifts in supply chain control, standard-setting leverage, and technological dependence. The interplay of FSR and the EU investment screening mechanism is especially evident in the domain of mergers and acquisitions (M&A). On the one hand, the latest EU Commission proposal to update the EU investment screening mechanism means both a more harmonised investment framework within the EU but also new requirements for M&A transactions in critical sectors.³² Simultaneously, the first in-depth investigation under the FSR concerned the acquisition of PPF Telecom Group, a Netherlands-headquartered operator active in Bulgaria, Hungary, Serbia, and Slovakia, by Emirates Telecommunications Group Company, owned by the UAE's sovereign wealth fund, the Emirates Investment Authority. The EU Commission examined whether the subsidies involved created distortions and found that the financial advantages at issue, most notably a state-backed guarantee and preferential financing, had the potential to distort competition after the transaction.³³

3. The Investment–Security Trade-Off in High-Tech Sectors

The adoption of such instruments shows how foreign investments, subsidies or coercion actions in critical sectors may raise security concerns, and recent crisis such as the Coronavirus pandemic and the war in Ukraine, coupled with the trade war waged by the Trump administration, show how vulnerabilities may arise for the EU in light of loss of control over critical technologies and foreign dependencies in critical value chains.³⁴ Monitoring transactions in the main critical technologies identified by the EU

³¹ European Commission. (2020). The EU toolbox for 5G security. <https://digital-strategy.ec.europa.eu/en/library/eu-toolbox-5g-security>

³² Yalçın, T., & Koç, E. (2025, April 7). *The future of foreign investments in the EU: Key insights into the proposed FDI Screening framework*. <https://www.taylorwessing.com/en/insights-and-events/insights/2025/04/the-future-of-foreign-investments-in-the-eu-key-insights-into-the-proposed-fdi-screening-framework>

³³ EU Foreign Subsidies Regulation & M&A: Latest Developments and Implications for Deal Strategy | Thought Leadership. (2025). Baker Botts. <https://www.bakerbotts.com/thought-leadership/publications/2025/july/eu-foreign-subsidies-regulation-ma-latest-developments-and-implications-for-deal-strategy>

³⁴ European Parliament Policy Department for Structural and Cohesion Policies. (2022). The impact of the COVID-19 pandemic and the war in Ukraine on EU cohesion. [https://www.europarl.europa.eu/RegData/etudes/STUD/2022/733095/IPOL_STU\(2022\)733095_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2022/733095/IPOL_STU(2022)733095_EN.pdf)

as highly likely to present the most sensitive and immediate risks related to technology security and technology leakage is therefore paramount, especially as far as advanced semiconductors, AI, quantum technologies and biotechnologies are concerned.³⁵ However, despite a growing attention from the EU Commission side regarding the need to monitor these sectors, both the EC and the business environment are aware of the importance of foreign investment for innovation, scaling start-ups, and integrating into global value chains. In such high-tech sectors, foreign capital can drive advancement and the European ambition to become a global hub for green and digital technologies.³⁶

It therefore does not come as a surprise that EU firms and institutions alike continue to emphasize the need for investment. As far as biotech is concerned, the EU Commission released its life sciences strategy in July 2025, which involved €350M for the development of sustainable innovations and improved biomanufacturing efficiency. The arrival of COVID-19 in late 2019 brought biotechnology, into the world's spotlight in an unprecedented way.³⁷ It is therefore evident that this strategy incorporates the upcoming EU Biotech Act. Despite being delayed until late 2026, the Biotech Act aims to speed up the approval of novel products such as cultivated meat and precision-fermented proteins. Members of the European Parliament have strongly endorsed a report on the future of the EU's biotechnology and biomanufacturing sector, describing it as of strategic importance for sustainability, economic security, food security, and public health.³⁸

Regarding quantum technologies, Henna Virkkunen, the EU Commissioner for technology sovereignty, said in July 2025 that "quantum technologies will transform our economy by helping solve complex challenges, develop new medicines, and safeguard critical infrastructure." The strategy also anticipates defence and security uses, ranging from secure communications to advanced battlefield sensing.³⁹ To boost investment and maintain European competitiveness in quantum technologies, the EU Commission is also promoting both public and private funding through the European Innovation Council, the TechEU Scale-up Fund, and the European Investment Bank. A cooperation framework with Member States will be set up to promote

³⁵ Szczepański, M. New EU economic security doctrine. European Parliamentary Research Service. [https://www.europarl.europa.eu/RegData/etudes/BRIE/2025/772915/EPRS_BRI\(2025\)772915_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/BRIE/2025/772915/EPRS_BRI(2025)772915_EN.pdf)

³⁶ European Commission (2025). Commission sets course for Europe's AI leadership with an ambitious AI Continent Action Plan https://ec.europa.eu/commission/presscorner/detail/en/ip_25_1013

³⁷ A Primer on Technology Transfer in the Field of Biotechnology—8 Biotechnology in the time of COVID-19. (2025). <https://www.wipo.int/web-publications/a-primer-on-technology-transfer-in-the-field-of-biotechnology/en/8-biotechnology-in-the-time-of-covid-19.html>

³⁸ Mridul, A. (2025, July 15). EU Parliament Votes to Make Biotech a Strategic Priority, Calls for An Investment Boost. Green Queen. <https://www.greenqueen.com.hk/?p=80571>

³⁹ Greenacre, M. (2025, July 3). EU unveils plan to boost quantum research and innovation | ScienceBusiness. <https://sciencebusiness.net/news/quantum-computing/eu-unveils-plan-boost-quantum-research-and-innovation>

alignment between EU and national programmes and monitor the security and resilience of quantum supply chains and their critical components.⁴⁰

On artificial intelligence, the EU Commission intends to use EU funds to take equity stakes in AI and quantum companies aiming to scale up, as part of its ongoing effort to counter U.S. dominance in the field. The AI act (Regulation 2024/1689 laying down harmonised rules on artificial intelligence) represents a EU stepping stone in this sense as it is the first-ever legal framework on AI worldwide, which addresses the risks of AI and positions Europe to play a leading role globally.⁴¹ Despite its pioneering nature, the impact of the AI act is yet to be assessed. In fact, the introduction of new legislation will not necessarily result in an immediate change due to existing power structures.⁴² Before the adoption of the AI Act, much of the regulatory capacity rested with large technology companies, and their influence continues to shape the field. While the AI act seeks to broaden participation by including civil society, academia, and fundamental rights bodies alongside private industry and public authorities, it remains uncertain whether these efforts will rebalance the distribution of influence.⁴³

Furthermore, a new Scaleup Europe Fund is to be set up in 2026, to be privately managed and co-financed by private investors.⁴⁴ European investment trends in AI are encouraging, as venture capital investment in European AI surged by 55% in the first quarter of 2025 compared with the same period in 2024. AI companies have already raised nearly €3 billion, while European tech stocks excluding AI have fallen 10%.⁴⁵ Notably, challenger AI startup Mistral secured a €600 million funding round to compete with industry leader OpenAI, led by General Catalyst alongside existing backers Lightspeed, Andreessen Horowitz, Bpifrance, and BNP Paribas.⁴⁶ The figures however do not reflect the impact of recent tariffs imposed by U.S. President Donald Trump: 125% on Chinese imports and 15% on European duty exports to the U.S.⁴⁷

⁴⁰ European Commission (2025). Questions and answers on the EU Quantum Strategy https://ec.europa.eu/commission/presscorner/detail/en/qanda_25_1683

⁴¹ Regulation (EU) 2024/1689 of the European Parliament and of the Council of 13 June 2024 laying down harmonised rules on artificial intelligence and amending Regulations (EC) No 300/2008, (EU) No 167/2013, (EU) No 168/2013, (EU) 2018/858, (EU) 2018/1139 and (EU) 2019/2144 and Directives 2014/90/EU, (EU) 2016/797 and (EU) 2020/1828 2024 (EU 2024/1689) (Artificial Intelligence Act) [2024] OJ L 2024/1689, art 144.

⁴² Kutscher, S. (2025). The EU AI Act: Law of Unintended Consequences? *Technology and Regulation*, 2025, 316–334. <https://doi.org/10.71265/krne7205>

⁴³ *ibid*

⁴⁴ Haeck, P. (2025, May 23). EU plans new fund to help tech companies build scale. POLITICO. <https://www.politico.eu/article/eu-commission-fund-tech-startups-ai-quantum-biotech-innovation/>

⁴⁵ Adams, L. (2025, January 6). A quarter of VC capital was invested in AI in 2024. Tech.Eu. <https://tech.eu/2025/01/06/a-quarter-of-vc-capital-was-invested-in-ai-in-2024/>

⁴⁶ Adams, L. (2024, June 11). French AI challenger Mistral AI raises €600M. Tech.Eu. <https://tech.eu/2024/06/11/french-challenger-mistral-raises-eur600m/>

⁴⁷ Davies, P. (2025, April 14). Could Trump's trade war undo investments in Europe's AI start-ups? Euronews. <https://www.euronews.com/next/2025/04/14/investment-in-the-eus-ai-start-ups-is-on-the-rise-but-could-trumps-trade-war-threaten-that>

In semiconductors, the 2023 European Chips Act underscores the EU commitment to strategic autonomy, and it has already triggered more than €80 billion in investments to expand chip manufacturing capacity, helping to boost the EU's market share against global competitors.⁴⁸ However, industry voices argue this is far from sufficient. In its official response to EU consultations on the upcoming investment budget, the industry group SEMI urged the Union to quadruple its chip spending and create a dedicated budget line for the sector.⁴⁹

Finally, investment in telecommunications in Europe averaged solely €117.9 per capita, just over half the €226.4 recorded in the U.S. and well behind Japan's €187.6, as highlighted by a report published by the industry association Connect Europe.⁵⁰ Industry representatives similarly argue that the lack of scale, as Europe counts 41 mobile operators with over 500,000 customers, not including smaller providers, limits their capacity to invest in both technology and infrastructure.⁵¹ Moreover, the issue has recently been raised in the European Parliament, where MEPs are questioning the EU Commission's strategies to tackle market fragmentation, stimulate investment, and strengthen Europe's position in next-generation network technologies.⁵²

Investments in these sectors should not only bring capital but also innovation. In the words of the EU Commission Executive Vice-President for a Clean, Just and Competitive Transition Ribera. As she mentioned in a recent interview, investments should foster innovation and talent, drawing on lessons from Chinese joint venture model.⁵³ She indeed pointed to Beijing's example in the past of demanding that companies investing in China do so through joint ventures and introduce technology to the market. It is interesting to note that the mood on this joint venture format has changed in a relatively short period of time given that, until recently, Sino-European joint ventures were considered as key catalysts in facilitating technology transfers in strategic industrial sectors to the benefit of China.⁵⁴ The China-risk which led to the creation of many of the EC tools still looms large, as the recent tariffs imposed on

⁴⁸ European Commission (2025, April 28). European Chips Act – Update on the latest milestones. <https://digital-strategy.ec.europa.eu/en/news/european-chips-act-update-latest-milestones>

⁴⁹ Vifflin, N. (2025, May 6). EU should quadruple semiconductor spending, industry group says. Reuters. <https://www.reuters.com/technology/eu-should-quadruple-semiconductor-spending-industry-group-says-2025-05-06/>

⁵⁰ State of Digital Communications 2025 / Connect Europe. (2025). <https://connecteurope.org/insights/reports/state-digital-communications-2025>

⁵¹ Smith, K., & Moens, B. (2025, April 21). European telecom groups line up deals in hope of looser merger rules. Financial Times. <https://www.ft.com/content/0834f6ec-5343-4ed4-8715-df1d130a07d8>

⁵² Question for written answer E-000467/2025 to the Commission. (2025). Strengthening investment and competitiveness in EU telecom networks. https://www.europarl.europa.eu/doceo/document/E-10-2025-000467_EN.html

⁵³ Hancock, A., & Leahy, J. (2025, July 14). EU to step up foreign subsidy probes, antitrust chief says. Financial Times. <https://www.ft.com/content/94a637a4-5b8f-479c-bc15-a862feb751d8>

⁵⁴ Korteweg, R., Kranenburg, V., & van der Putten, F.-P. (2022, August 29). *Sino-European joint ventures and the risk of technology transfers*. Clingendael. <https://www.clingendael.org/publication/sino-european-joint-ventures-and-risk-technology-transfers>

Chinese EVs and the continuous probes into Chinese overcapacities show.⁵⁵ Such cases show how even non-critical sectors can influence essential value chains, where strategic dependencies can emerge in areas as diverse as critical minerals, software standards, or EV battery components. However, Chinese investments are not among the most notified ones in the EU. Of the 488 cases notified in 2023, the six main jurisdictions of origin were the USA, the UK, United Arab Emirates, China (including Hong Kong), Canada and Japan. FDIs from China (including Hong Kong) ranked 4th in 2023 in terms of total number of transactions with a share of 6%, compared to the 32% share of the US.⁵⁶ Furthermore, the latest data shared by MERICS and the Rhodium group highlight that China's overall investment footprint in Europe remains modest. Although recent greenfield EV investments have attracted attention, the total stock of Chinese EV FDI is still negligible compared with Europe's total FDI stock, the EU's investments in China, and the scale of the EU-China trade relationship. While China is becoming a leading investor in specific markets such as Hungary, EU, U.S., and South Korean investors continue to hold a stronger position.⁵⁷

On these bases, a delicate balance is needed. Over-regulation deters valuable investment, while lax oversight risks sovereignty. Transparent, proportionate, and predictable frameworks are essential. Clarity in regulatory procedures increases investor confidence and allows for risk-based assessments. Clear, coordinated regulation fosters intra-EU trust. Harmonised FDI screening and FSR oversight reduce regulatory arbitrage and enable consistent strategic decisions. Moreover, cooperation mechanisms allow Member States to share intelligence and prevent regulatory gaps. While the EU-US Trade and Technology Council once promised alignment with allies like the U.S., current tariff disputes complicate transatlantic coordination.⁵⁸

Recent application of the EU FDI screening mechanism points to a shift toward more, forward-looking analyses, especially in sectors marked by rapid technological change. This is especially shown by key recent case involved the Dutch government retroactively reviewing the acquisition of Nowi, a Dutch semiconductor startup specialized in manufacturing power management chips, by the Chinese controlled Nexperia. The acquisition was dated November 2022, but in June 2023 the Dutch government initiated an investigation into the takeover stating that a cancellation

⁵⁵ Gunter, J., Brown, A., Chimits, F., Hmaidi, A., Vasselier, A., & Zenglein, M. J. (2025, April 1). *Beyond overcapacity: Chinese-style modernization and the clash of economic models* / Merics. Mercator Institute for China Studies. <https://merics.org/en/report/beyond-overcapacity-chinese-style-modernization-and-clash-economic-models>

⁵⁶ Fourth Annual Report on the Screening of Foreign Direct Investments into the Union, *op.cit.*

⁵⁷ Kratz, A., Zenglein, M. J., Mischer, A., Sebastian, G., & Meyer, A. (2025, May 21). *Chinese investment rebounds despite growing frictions - Chinese FDI in Europe: 2024 Update* / Merics. Mercator Institute for China Studies. <https://merics.org/en/report/chinese-investment-rebounds-despite-growing-frictions-chinese-fdi-europe-2024-update>

⁵⁸ Belton, E., & Gruenig, M. (2025). *The Future of the EU- US Trade and Technology Council* / Heinrich Böll Stiftung / Washington, DC Office—USA, Canada, Global Dialogue. <https://us.boell.org/en/2025/01/17/future-eu-us-trade-and-technology-council>

could be possible if the deal was found to affect national security. The Dutch government eventually decided to green-light the deal in November 2023, to the delight of Nexperia Netherlands director Charles Smit who argued that “it is important that there is a clear policy that strengthens the Dutch investment climate. In these uncertain times, a transparent, fact-based dialogue between government and business is of paramount importance.”⁵⁹ Nonetheless, the Dutch government has decided to intervene in company decisions at Nexperia in October 2025. The decision was taken as Nexperia’s administrative shortcomings could threaten the safeguard of crucial technological knowledge and capacity on Dutch and European soil.⁶⁰ This latest development illustrates how an EU government chose to intervene and take control of a Chinese-owned semiconductor maker, despite having previously approved an acquisition by the same company. The case underscores the delicate nature of the investment-security trade-off and highlights the importance of maintaining clarity and dialogue between government and business.

4. Conclusion: Towards a Coherent Strategic Sovereignty

Strategic technologies will define the EU’s role in the global order. Ensuring control over key assets while remaining open to international collaboration is central to this effort. The EU FDI Screening Regulation and FSR are vital tools, but their success depends on thoughtful implementation, political coordination, and regulatory flexibility. Ongoing review of FDI and FSR regimes, based on early experience, is essential to maintain effectiveness without impeding growth. The EU Commission may also need to increase dialogue with investors and third-country partners. Outreach, transparency, and guidance documents can help minimize uncertainty. Public-private partnerships may further support strategic sectors while ensuring resilience.

This paper invites stakeholders to reflect on the evolving regulatory landscape and consider how Europe can build a model of strategic sovereignty that is both secure and globally engaged. Realizing this vision requires vigilance, cooperation, and a commitment to long-term resilience.

Looking ahead, questions remain about the future direction of Europe’s economic security strategy. Can regulatory burdens be minimized while preserving oversight? How can the EU cooperate more effectively with like-minded partners to safeguard shared technological ecosystems? Answering these questions will be essential to

⁵⁹ Saxena, V. (2023, November 28). Chinese-Owned Nexperia Set to Take Over Dutch Chip Startup. *Asia Financial*. <https://www.asiafinancial.com/chinese-owned-nexperia-set-to-take-over-dutch-chip-startup>

⁶⁰ Haeck, P. (2025, October 13). Dutch government seizes control of Chinese-owned chipmaker Nexperia. POLITICO. <https://www.politico.eu/article/dutch-government-seize-control-china-owned-chipmaker-nexperia/>



shaping a resilient and competitive Europe fit for the geopolitical and technological challenges of the coming decades.

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