



3. To Innovate or to Regulate? The False Dichotomy at the Heart of Europe's Industrial Approach

by Max von Thun

After decades of neglect, industrial policy once again finds itself at the heart of Europe's policy ambitions. The perceived need to accelerate the so-called "digital transition" is a core focus of these ambitions, driven in large part by fears about Europe being "left behind" in the global race for technological supremacy. Meanwhile, rising geopolitical instability and the combined economic impact of the pandemic and war in Ukraine have made Europeans painfully aware of their dependence on concentrated global supply chains for essential goods.

A key milestone in this ongoing revival of industrial policy was the publication, in early 2020, of the European Commission's first formal industrial strategy in many years. This was followed by a flurry of other measures, from legislation including the European Chips Act and the Net-Zero Industry Act to the relaxation of EU state aid rules and the creation of a €750 billion post-COVID economic recovery fund. These new tools build on a considerable arsenal of existing programs and powers, including the EU's competition regime, various public investment schemes, and initiatives at the national level.

In this chapter, the phrase industrial policy is used expansively to include not only traditional levers like direct state investments and subsidies, but also regulatory frameworks like competition law and other digital regulation that can be creatively wielded to produce an environment favorable to national companies. European policymakers—particularly at the national level—are increasingly intent on using industrial policy, as broadly defined here, to accelerate the development and uptake of AI. This trend has been hastened by the explosion of interest in AI triggered by the launch of ChatGPT in November 2022. This has not only resulted in increasing amounts of public funding being directed toward AI and related technologies, but has in some instances led policymakers to actively undermine efforts to impose regulatory guardrails, most notably in relation to the EU's AI Act. With European elections set to take place in 2024, these tense debates over Europe's economic relevance in AI will only grow in intensity.

The Rise and Demise of Industrial Policy in Europe: A Primer

Before diving further into the details of Europe's renewed commitment to industrial strategy and how that relates to AI, it is worth briefly considering the historical developments that led up to this point, and how they inform today's debate.

The rise of the European industrial state coincided with the major wars and economic disruption of the first half of the twentieth century, both of which greatly increased the need for state capacity and intervention. This was followed by the heyday of European industrial policy in the decades following the Second World War, as governments sought to rebuild the war-ravaged European continent upon more equitable socioeconomic foundations, drawing on substantial economic support

from the United States through the Marshall Plan. Industrial policy during the postwar era was highly interventionist, with governments seeking to “pick winners” through support targeted at specific sectors, and with state-owned firms representing a substantial share of economic activity.

From the 1980s onward, however, as the influence of neoliberal economic thinking and the “Washington Consensus” approached its zenith, industrial intervention was replaced by measures to unleash market forces and shrink the role of the state in the economy through privatization and deregulation. A key priority during these decades was the establishment of a European “single market” based on the free movement of goods, capital, and people. Industrial policy in this context was largely restricted to eliminating barriers to trade, promoting market competition, and investing in the research and development (R&D) and skills needed to remain globally competitive.^{244 245}

This consensus began to erode at the beginning of the twenty-first century, and has since almost entirely collapsed. The 2007–2008 financial crash, and the severe and protracted economic crisis it caused in Europe, greatly increased the willingness of European governments to intervene in the economy, from publicly funded retraining and job-creation programs to public investment in economically disadvantaged regions. While most intervention took place at the national level, there was also a marked shift (at least ideologically) at the EU level.²⁴⁶ In recent years this shift has accelerated rapidly due to a number of factors outlined below, including the rise of China and the economic impact of the COVID-19 pandemic and Russia’s invasion of Ukraine.

While this revival is not without contestation, especially from smaller countries that see calls for more industrial policy as cover for larger, richer member states to prop up domestic companies and industries,²⁴⁷ it has been supercharged in the past few years by three key overlapping developments.

²⁴⁴ Simone Tagliapietra and Reinhilde Veugelers, “The History of Industrial Policy in Europe,” in *A Green Industrial Policy for Europe* (Brussels: Bruegel, 2020), <http://www.jstor.org/stable/resrep286027>.

²⁴⁵ Sebastian Dullien and Jonathan Hackenbroich, “European Industrial Policy: A Crucial Element of Strategic Autonomy,” Foundation for European Progressive Studies, May 2022, https://feeps-europe.eu/wp-content/uploads/2022/05/esa_european-industrial-policy_ac1.pdf.

²⁴⁶ In 2012, the European Commission launched a Strategy for the Re-Industrialization of Europe, which aimed at increasing the share of manufacturing in the European economy from 15 percent to 20 percent of GDP, through a combination of public investment, training programs, and better access to finance and markets.

²⁴⁷ Although few are advocating for a full return to the *laissez-faire* approach of the past, some fear the continent risks throwing the baby out with the bathwater by going too far in embracing intervention. This tension can be seen in the relationship between the EU’s larger members (especially France and Germany) and smaller northern, eastern, and Scandinavian countries. The latter have often interpreted calls for more industrial policy as cover for larger, richer member states to prop up domestic companies and industries, at the expense of the EU single market’s “level playing field.” See Gabriela Baczyńska, “Eleven EU Countries Urge ‘Great Caution’ in Loosening State Aid Rules” Reuters, February 14, 2023, <https://www.reuters.com/world/europe/eleven-eu-countries-urge-great-caution-loosening-state-aid-rules-2023-02-14>.

First, both the rise of China as a major economic and political power, and the growing insularity and unpredictability of the US as a global actor, have made European policymakers far more aware of the continent's economic and geopolitical weaknesses. Industrial policy is thus seen as a means of reducing these dependencies and weaknesses, while at the same time strengthening Europe's global competitiveness.

Second, the economic disruption caused by the COVID-19 pandemic, and subsequently by Russia's invasion of Ukraine, highlighted Europe's precarious dependence on foreign markets and actors for critical supplies, from medical equipment to semiconductors and rare earths. These crises have shaken Europe's confidence in the capacity of global supply chains to meet its essential needs, and have led to calls for greater diversification of supply (including increased local and regional production) to strengthen the continent's resilience to external shocks.

The third factor is Europe's desire to be globally competitive when it comes to developing advanced technologies and tackling climate change. As in other places, the urgent need to reduce emissions—and the private sector's failure to meet the challenge—has opened up a clear role for industrial policy in steering and accelerating the green transition. Most recently, this urgency has been magnified by the perceived need to “keep up” with green industrial policy initiatives elsewhere (above all the US Inflation Reduction Act) amid fears that foreign subsidies will lure businesses and investment away from Europe.²⁴⁸

This logic of competitiveness is also increasingly being applied to technology. Frustration over Europe's failure to produce globally competitive technology firms (only one European company, ASML, figures among the world's twenty largest tech firms, and the continent has few leading tech startups²⁴⁹), as well as concerns that this history will repeat itself with AI and other emerging technologies, mean that digital now finds itself at the heart of the EU's emerging industrial policy agenda.

²⁴⁸ Christian Scheinert, “Briefing: EU's Response to the US Inflation Reduction Act (IRA),” European Parliament, June 2, 2023, [https://www.europarl.europa.eu/thinktank/en/document/IPOL_IDA\(2023\)740087](https://www.europarl.europa.eu/thinktank/en/document/IPOL_IDA(2023)740087).

²⁴⁹ Monika Sherwood, Aneil Singh, and Alessio Terzi, “European Industrial Policy for the Green and Digital Revolution,” *Science and Public Policy*, 50, no. 5 (October 2023): 842–857, <https://doi.org/10.1093/scipol/scad018>.

How Industrial Policy Is Being Used to Drive the EU's Digital and Green Objectives

A major milestone in the EU's renewed interest in industrial policy was the publication in March 2020 of the Commission's New Industrial Strategy for Europe, the bloc's first formal industrial strategy in many years.²⁵⁰ At the heart of the strategy are the so-called "twin transitions" to a green and digital economy, alongside an explicit commitment to enhancing Europe's "open strategic autonomy." While the strategy contained few new policy measures, it provided an overarching intellectual framework for the EU's industrial policies that was previously lacking.

Another important step in the EU's expanding industrial policy arsenal was the creation of the Recovery and Resilience Facility (RRF) as a response to the economic shock of the pandemic. Through the RRF, the Commission took the unprecedented step of borrowing money directly on capital markets and then using the subsequent funds to distribute grants and loans to member states for their national economic recovery plans, with a heavy emphasis on investment in green and digital infrastructure and capabilities.²⁵¹ While intended as a one-off measure, the RRF set a major precedent with regard to the EU's centralized fiscal capabilities that is likely to be repeated in future economic crises, if not in times of stability.

Finally, the past few years have seen significant modifications to the EU's state aid regime.²⁵² The rules have been repeatedly loosened to give governments greater leeway to subsidize industry: first in response to the COVID-19 pandemic, then following the energy crisis triggered by Russia's invasion of Ukraine, and once more in response to the US Inflation Reduction Act.²⁵³ Important Projects of Common European Interest (IPCEI)—which enable member states to join forces in using state

²⁵⁰ European Commission, "European Industrial Strategy," accessed December 18, 2023, https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/europe-fit-digital-age/european-industrial-strategy_en.

²⁵¹ The total amount allocated under the RRF is €723 billion, with a roughly fifty-fifty split between grants and loans. To receive support, member states were required to submit national plans allocating at least 37 percent of the funding to green measures and another 20 percent to digital initiatives, reflecting the "twin transitions" in the industrial strategy. These plans are in the process of being implemented across the EU, with governments having until December 2026 to make reforms and investments.

²⁵² The state aid rules, enshrined in Article 107 of the Treaty on the Functioning of the European Union (TFEU), require the Commission to approve or reject large subsidies provided by member states to national businesses. The regime is designed to prevent governments with greater financial resources from using subsidies, tax breaks, and other fiscal measures to favor domestic industry, given the distortive effect this would have on the EU's internal market.

²⁵³ European Commission, "State Aid: Commission Adopts Temporary Crisis and Transition Framework to Further Support Transition towards Net-Zero Economy," press release, March 9, 2023, https://ec.europa.eu/commission/presscorner/detail/en/ip_23_1563

aid to address market failures and promote innovation—have also become more prominent in recent years, with the Commission approving separate multibillion euro IPCEIs on chips, cloud computing, and hydrogen in the past two years alone.²⁵⁴

While each relaxation of the state aid rules has been temporary, certain member states, particularly France and Germany, have issued calls to extend them beyond their current deadlines.²⁵⁵ This has been contested by smaller countries concerned about unfair advantages for their larger peers; data showing that nearly four-fifths of approved state aid was spent by France and Germany suggests they have a case.²⁵⁶ The Commission's increasingly permissive approach to state aid has also raised alarm bells with civil society groups concerned about corporate capture and rising market concentration.²⁵⁷

The New Industrial Strategy, the Resilience and Recovery Fund, and the loosening of the state aid rules are three key developments in the EU's increasingly interventionist approach to industrial policy. But the EU has many other relevant tools in its industrial arsenal—from its competition, export control, and investment screening regimes to sizeable spending programs, including the €95 billion Horizon Europe R&D funding program, the European Regional Development Fund, the European Investment Bank, and the recently established European Innovation Council, which invests directly in innovative companies.

Much of the recent legislation passed by the EU also has a significant industrial policy flavor, including the European Chips Act (which seeks to increase the bloc's share in the global semiconductor market), the Critical Raw Materials Act (which aims to secure the EU's access to the raw materials needed in key sectors), and the Net-Zero Industry Act (intended to scale-up the manufacture of clean technologies in Europe). Meanwhile, many of the EU's flagship digital policy initiatives, including the Digital Markets Act (DMA) and the Data Act, have the explicit aim of boosting Europe's economic competitiveness and technological sovereignty.

²⁵⁴ European Commission, "Approved Integrated Important Projects of Common European Interest," accessed December 18, 2023, https://competition-policy.ec.europa.eu/state-aid/ipcei/approved-ipceis_en.

²⁵⁵ Varg Folman, Giorgio Leali, and Aoife White, "France and Germany Risk EU Rift over Energy Subsidies," *Politico*, October 26, 2023, <https://www.politico.eu/article/france-joins-germany-in-pushing-for-energy-aid-exemption>.

²⁵⁶ Jorge Liboreiro, "Germany & France Account for Most EU Subsidies. Here's Why It's a Concern," Euronews, January 17, 2023, <https://www.euronews.com/business/2023/01/17/germany-france-account-for-most-eu-state-aid-heres-why-its-a-concern>.

²⁵⁷ Open Markets Institute, "Letter to European Commission Warns against Subsidizing Large, Dominant Corporations at the Expense of SMEs in Clean Energy Transition," press release, March 13, 2023, <https://www.openmarketsinstitute.org/publications/letter-to-european-commission-warns-against-over-subsidizing-large-dominant-corporations-at-the-expense-of-smes-in-clean-energy-transition>.

AI and Industrial Policy

The EU's identification of AI as an economic opportunity and component of its future competitiveness is relatively recent.²⁵⁸ The Commission's 2015 Digital Single Market Strategy failed to mention AI whatsoever, while its 2017 review of the strategy only included limited references. This began to shift with the 2018 European Strategy on AI, which focused more on opportunities than threats, and was cemented in 2021 by the Commission's Communication on Fostering a European Approach to Artificial Intelligence. The communication sets forth an ambition to turn the EU into a "world-class hub for AI" and notes the technology's "enormous potential to provide European industry with a competitive edge."²⁵⁹

Ambitious rhetoric aside, until very recently AI has been an important but not central part of the EU's industrial policy agenda. Many of the EU funding vehicles referenced above provide funding for AI research and industrial uptake, even if the technology is not their main focus. For example, the formal guidance to member states on the RRF includes AI R&D and deployment, as well as the use of AI in public service delivery, as valid targets for national investments.²⁶⁰ Through Horizon Europe, the European Innovation Council, and other programs, the Commission channels billions of euros per year into AI research and innovation.

To bring greater coherence to these efforts, in January the Commission announced an AI innovation package designed to "support European startups and SMEs in the development of trustworthy AI that respects EU values and rules".²⁶¹ Though much of the package simply restates or reframes existing initiatives, it also fleshed out a commitment (made by Commission President Ursula von der Leyen in September 2023) to open up the EU's public supercomputers to European researchers and AI startups. The package also makes close to €3 billion of funding available for public computing infrastructure, startup incubation and accelerating industrial uptake of AI. While many of the above measures could foreseeably foster European alternatives to Big Tech's dominance, the package is also notable for its unreserved

²⁵⁸ Zach Meyers and John Springford, "How Europe can make the most of AI," Centre for European Reform, September 14, 2023, <https://www.cer.eu/publications/archive/policy-brief/2023/how-europe-can-make-most-ai>.

²⁵⁹ European Commission, "Communication on Fostering a European Approach to Artificial Intelligence," April 21, 2021, <https://digital-strategy.ec.europa.eu/en/library/communication-fostering-european-approach-artificial-intelligence>.

²⁶⁰ European Commission, "Commission Staff Working Document: Guidance to Member States Recovery and Resilience Plans," January 22, 2021, https://commission.europa.eu/system/files/2021-01/document_travail_service_part1_v2_en.pdf.

²⁶¹ European Commission, "Commission Launches AI Innovation Package to Support Artificial Intelligence Startups and SMEs," press release, 24 January, 2024, https://ec.europa.eu/commission/presscorner/detail/en/ip_24_383.

endorsement of the data-intensive “generative AI” applications and large language models favoured by those same firms, as opposed to other forms of the technology.

Additional national funding for AI, and AI-related inputs and infrastructure, is also being channeled through the state aid framework discussed earlier. For example, a recently approved IPCEI on “Next Generation Cloud Infrastructure and Services” led by France, Germany, Italy, and four other member states will allocate €1.2 billion in state aid to projects implemented by nineteen companies, including Deutsche Telekom, Siemens, Orange, Atos, and SAP (only European companies were eligible to participate).²⁶² The goal of the initiative is to develop a “set of advanced cloud and edge services” that help achieve the EU’s digital objectives, including but not limited to global leadership in AI. Indeed, upon announcing the initiative, former Competition Commissioner Didier Reynders suggested it could support the development of generative artificial intelligence models in languages other than English.²⁶³

Meanwhile, legislative measures such as the European Chips Act and the critical raw materials (CRMs) are intended to help the EU secure the advanced semiconductors (and the materials required to manufacture those chips) used to train and run cutting-edge AI models and applications.

AI also features prominently in the EU’s digital policy agenda, in which industrial policy objectives are more implicit than explicit. The EU’s flagship initiative in this area is the recently passed AI Act, which will impose a set of risk-based horizontal obligations on AI developers and providers.²⁶⁴ “Unacceptable” use cases—including social scoring and manipulation—will be banned, while “high-risk” use cases—including worker surveillance and credit scoring—will be subject to stringent obligations on transparency, risk assessment and mitigation, high quality datasets and activity logging, and human oversight.

Even as the AI Act is primarily oriented around mitigating the risks associated with AI systems, there has been a parallel, and quieter, narrative that justifies its beneficial economic impacts for Europe. For example, the Commission has explicitly argued that trust in AI (which the legislation is intended to establish) is necessary

²⁶² European Commission, “Commission Approves up to €1.2 Billion of State Aid by Seven Member States for an Important Project of Common European Interest in Cloud and Edge Computing Technologies,” press release, December 5, 2023, https://ec.europa.eu/commission/presscorner/detail/en/ip_23_6246.

²⁶³ Edith Hanock and Aiofe White, “Cloud and Edge Computing Cleared by EU to Get €1.2B Subsidy,” *Politico*, December 5, 2023, <https://pro.politico.eu/news/172563>.

²⁶⁴ European Commission, “Regulatory Framework Proposal on Artificial Intelligence,” accessed December 18, 2023, <https://digital-strategy.ec.europa.eu/en/policies/regulatory-framework-ai>.

before the technology can be rolled out across society at scale. The recital to the Act claims that EU-wide regulation will facilitate AI uptake by preventing regulatory fragmentation, and that this will help the EU become a “global leader in the development of secure, trustworthy and ethical artificial intelligence.” Moreover, a handful of provisions in the Act are specifically designed to encourage AI innovation, including regulatory sandboxes for testing novel AI systems and measures to lighten the regulatory burden on small businesses.

In fact, the economic impacts of the legislation found themselves front and center in the negotiations on the AI Act, where fears about Europe’s lack of competitiveness in AI were whipped up to argue for a weaker regulatory regime. While some of these concerns were expressed by legislators working on the Act, the majority of the criticism—at least initially—came from industry, particularly large businesses. An open letter from June 2023, signed by companies including Siemens, Airbus, Renault, and Heineken, warned that the Act would “jeopardise Europe’s competitiveness and technological sovereignty” and called for the legislation to be watered down.²⁶⁵ A similar letter, signed primarily by associations representing large corporate interests (including lobby groups the Computer & Communications Industry Association, DOT Europe, and the Information Technology Industry Council), warned that amendments made during the legislative process risked “inhibiting the development and use of AI in Europe.”²⁶⁶

In particular, the launch of ChatGPT and heightened public awareness of generative AI fueled debate over the AI Act’s role in encouraging (or stifling) the development and uptake of the technology in Europe. While the Act was drafted before such models were widely available, their rapid introduction triggered a scramble to update the legislation in response. Led by the European Parliament, legislators pushed to introduce a new set of regulatory obligations targeted at “general purpose AI systems,” an effort that was ultimately successful despite fierce opposition. These obligations are tiered and targeted at the most powerful and advanced models posing “systemic risk,” with other applications and models being subject to lighter-touch transparency requirements.²⁶⁷

²⁶⁵ Javier Espinoza, “European Companies Sound Alarm over Draft AI Law,” *Financial Times*, June 30, 2023, <https://www.ft.com/content/9b72a5f4-a6d8-41aa-95b8-c75f0bc92465>.

²⁶⁶ Computer & Communications Industry Association, “AI Act: Regulate High-Risk Use Instead of Technology, EU Negotiators Told by Industry,” press release, September 29, 2023, <https://ccianet.org/news/2023/09/ai-act-regulate-high-risk-use-instead-of-technology-eu-negotiators-told-by-industry>.

²⁶⁷ European Parliament, “Artificial Intelligence Act: Deal on Comprehensive Rules for Trustworthy AI,” press release, December 9, 2023, <https://www.europarl.europa.eu/news/en/press-room/20231206IPR15699/artificial-intelligence-act-deal-on-comprehensive-rules-for-trustworthy-ai>.

Despite their inclusion in the final text, these efforts to apply the AI Act to general-purpose AI systems faced stiff opposition from a number of member states worried about economic competitiveness. Led by France, Germany, and Italy, these governments argued that imposing strict regulatory requirements on foundation models would harm AI innovation in Europe and hamper the continent's ability to produce globally competitive AI companies. Instead, these member states proposed light-touch "codes of conduct" for general-purpose systems, while regulating downstream AI applications more comprehensively.

As a paper authored by the three countries argued, "the inherent risks lie in the application of AI systems rather than in the technology itself."²⁶⁸ Reports suggested that the French and German governments were heavily lobbied by Mistral AI and Aleph Alpha—the leading French and German AI startups, respectively—to adopt this approach.²⁶⁹ While this late push was ultimately a failure thanks to strong pushback from the European Parliament and civil society, French President Emmanuel Macron nonetheless warned following the agreement that the regulation would need to be "reevaluated" if it led to the loss of "AI pioneers and leaders," suggesting that the controversy is likely to continue into the Act's implementation and enforcement.²⁷⁰

While not a prominent part of the debate so far, competition policy has an integral role to play in promoting openness in AI and ensuring the technology is used safely, fairly, and responsibly.²⁷¹ The EU's powerful competition policy toolkit—including the recently adopted Digital Markets Act (DMA), which gives the Commission powers to ban anticompetitive practices by dominant "gatekeeper" firms—could be used to promote a fairer and more diverse AI European ecosystem, by preventing Big Tech's accelerating efforts to dominate AI through monopolistic conduct and anti-competitive partnerships and acquisitions.

But this potential has so far been undermined by the absence of foundation models from the DMA's list of "core platform services" (to which the Act's obligations apply)

²⁶⁸ Luca Bertuzzi, "France, Germany, Italy Push for 'Mandatory Self-Regulation' for Foundation Models in EU's AI Law," Euractiv, November 19, 2023, <https://www.euractiv.com/section/artificial-intelligence/news/france-germany-italy-push-for-mandatory-self-regulation-for-foundation-models-in-eus-ai-law>.

²⁶⁹ Natasha Lomas, "France's Mistral Dials Up Call for EU AI Act to Fix Rules for Apps, Not Model Makers," *TechCrunch*, November 16, 2023, <https://techcrunch.com/2023/11/16/mistral-eu-ai-act>.

²⁷⁰ W.G. and Agence France-Presse, "Pas une bonne idée: Emmanuel Macron ne veut pas encadrer L'IA 'plus que les autres,'" BFMTV, December 11, 2023, https://www.bfmtv.com/tech/intelligence-artificielle/pas-une-bonne-idee-d-encadrer-l-ia-plus-que-les-autres-macron-conteste-la-regulation-europeenne_AD-202312110800.html.

²⁷¹ Barry Lynn, Karina Montoya, and Max von Thun, "AI in the Public Interest: Confronting the Monopoly Threat," Open Markets Institute, November 15, 2023, <https://www.openmarketsinstitute.org/publications/report-ai-in-the-public-interest-confronting-the-monopoly-threat>.

and the Commission's failure to include dominant cloud providers in its initial round of designations.²⁷² The Commission is already coming under pressure to fill these gaps, with MEPs in the European Parliament recently calling for it to investigate whether cloud computing and generative AI should be covered by the DMA.²⁷³ In response. In response to this mounting pressure, in January the Commission launched a number of initiatives, including reviewing whether Microsoft's partnership with OpenAI is investigable under the EU's Merger Regulation, and launching a consultation on competition dynamics in generative AI, mirroring similar actions taken by the UK's Competition and Markets Authority and the U.S. Federal Trade Commission.²⁷⁴

FRANCE AND THE QUEST FOR NATIONAL UNICORNS

It is at the national level where the most explicit efforts to support AI through industrial policy are taking place in Europe. This is not in itself surprising, given the EU's limited fiscal resources, economic competition between member states themselves, and differing views across the bloc on both the benefits of AI and the merits of industrial policy. Under President Emmanuel Macron, France has not shied away from using industrial policy measures to pursue national and European leadership in AI. Aside from France, Germany has committed to spending close to €500 million on AI research and innovation in 2024, including investments in computing infrastructure, skills, and academic professorships.²⁷⁵ Spain's national AI strategy, launched in 2020, envisioned the country spending €600 million between 2021 and 2023 on R&D, accelerating AI uptake in industry and the public sector, and creating an "ethical and normative framework" for AI (though a mere €8 million was allocated to this cause).²⁷⁶

²⁷² Max von Thun, "A Step Forward for the Digital Markets Act, But Big Questions Remain," *Tech Policy Press*, September 14, 2023, <https://techpolicy.press/a-step-forward-for-the-digital-markets-act-but-big-questions-remain>.

²⁷³ Luca Bertuzzi, "MEPs Call to Ramp Up Big Tech Enforcement in Competition Review," Euractiv, December 5, 2023, <https://www.euractiv.com/section/competition/news/meps-call-to-ramp-up-big-tech-enforcement-in-competition-review>.

²⁷⁴ European Commission, "Commission Launches Calls For Contributions on Competition in Virtual Worlds and Generative AI," press release, January 9, 2024, https://ec.europa.eu/commission/presscorner/detail/en/IP_24_85.

²⁷⁵ David Matthews, "Germany Promises Huge Boost in Artificial Intelligence Research Funding and European Coordination," *Science Business*, August 31, 2023, <https://sciencebusiness.net/news/ai/germany-promises-huge-boost-artificial-intelligence-research-funding-and-european>.

²⁷⁶ European Commission, *Spain AI Strategy Report*, accessed December 18, 2023, https://ai-watch.ec.europa.eu/countries/spain/spain-ai-strategy-report_en

The trajectory in France is worth detailing, and long predates the current generative AI frenzy, with Macron announcing an initial AI strategy back in 2018 accompanied by €1.5 billion in public funding. Macron framed the strategy as a means of turning France into a “startup nation” while also evoking geopolitical competition, warning that the country risked giving up its sovereignty if it “missed the start of the war.”²⁷⁷ Among other things, the strategy focused on the establishment of specialized research institutes, funding for startups, open data, and the fostering and recruitment of talent.

The strategy has been topped up several times with additional resources, first in 2021 and subsequently in 2023. The 2021 update provided an additional €1.5 billion in public funding and set precise targets for the training of students and France’s future share of the global AI market. The 2023 update pumped over a billion euros of additional funding into AI “clusters,” open-source AI, and state supercomputers, while also seeking to direct €7 billion worth of private institutional investment into AI. In remarks announcing the latest round of investments at tech industry conference VivaTech, Macron leaned heavily on the need to remain competitive with China and the US, including matching state support in those nations.²⁷⁸

The French government’s AI industrial policies are part of a broader effort, largely driven by Macron, to establish France as a leading tech nation both within Europe and globally. His government frequently references the need to reduce France’s dependence on US Big Tech firms as a core rationale for these measures. For example, in explaining France’s public support for open-source AI, the country’s ambassador for digital affairs referenced the need to avoid a “world with two or three or four monopolies” who “negotiate the rights to innovate.”²⁷⁹

To some extent paradoxically, this apparent commitment to reining in Big Tech monopolies has been accompanied by aspirations to create national champions. In 2022 Macron called for France to create at least 100 “unicorns” (companies worth at least €1 billion) by 2023,²⁸⁰ and in his remarks at VivaTech the President expressed his desire for AI

²⁷⁷ Mathieu Rosemain and Michel Rose, “France to Spend \$1.8 Billion on AI to Compete with U.S., China,” Reuters, March 29, 2018, <https://www.reuters.com/article/us-france-tech/france-to-spend-1-8-billion-on-ai-to-compete-with-u-s-china-idUSKBN1H51XP>.

²⁷⁸ Théophile Hartmann, “Macron Sets Out France’s Ambition to Boost AI, Green Tech,” Euractiv, June 15, 2023, <https://www.euractiv.com/section/industrial-strategy/news/macron-sets-out-frances-ambition-to-boost-ai-green-tech>.

²⁷⁹ Mohar Chatterjee and Gian Volpicelli, “France Bets Big on Open-Source AI,” *Politico*, August 4, 2023, <https://www.politico.eu/article/open-source-artificial-intelligence-france-bets-big>.

²⁸⁰ Sudip Kar-Gupta, “Macron Aims for Surge in Number of French Tech Unicorns by 2030,” Reuters, June 17, 2022, <https://www.reuters.com/technology/macron-aims-surge-number-french-tech-unicorns-by-2030-2022-06-17>.

“champions” in France.²⁸¹ Among other things, this has led to attempts (discussed earlier) to water down regulation to protect these perceived champions. Mistral AI, a company founded in 2023, has been one of the key beneficiaries of these efforts. The role of Cedric O—a former digital minister and now an investor in and adviser to Mistral—in lobbying the French government on AI regulation has been particularly controversial.²⁸²

The French government’s willingness to prioritize industrial goals over safety is evident in multiple comments made by French officials in recent years. As a minister, O himself described as “nonsense” the European tendency to put “regulation before innovation,”²⁸³ while O’s successor Jean-Noël Barrot has warned that excessive regulation could kill Europe’s ability to create its own leading generative AI players.²⁸⁴ Similar concerns have been voiced by Macron himself, who has called for EU AI regulation to be “controlled, not punitive, to preserve innovation.”²⁸⁵

Conclusion

With the next round of European elections scheduled for June 2024, followed shortly by the appointment of a new European Commission, debates about the EU’s future strategic direction are reaching a fever pitch. The issue of European competitiveness in the global AI race finds itself at the center of these discussions, with former Italian Prime Minister Mario Draghi due to publish a report (requested by Commission President von der Leyen) on the topic later this year. Industry, including Big Tech, is using this opportunity to lobby aggressively for a much greater focus on competitiveness (equated by these actors with cutting regulation) under the next Commission, raising the specter of Europe’s global irrelevance if this advice is ignored.²⁸⁶

²⁸¹ *Le Monde* and Agence France-Presse, “Macron Announces €500 Million in Funding for AI,” *Le Monde*, June 14, 2023, https://www.lemonde.fr/en/france/article/2023/06/14/macron-wants-france-to-be-among-ai-leaders_6031624_7.html.

²⁸² Corporate Europe Observatory, “Byte by Byte: How Big Tech Undermined the AI Act,” November 17, 2023, <https://corporateeurope.org/en/2023/11/byte-by-byte>.

²⁸³ Matthieu Pollet, “French AI Strategy: Tech Sector to Receive over €2 Bln in Next 5 Years,” Euractiv, November 9, 2021, <https://www.euractiv.com/section/digital/news/french-ai-strategy-tech-sector-to-receive-over-e2-bln-in-next-5-years>.

²⁸⁴ Laura Kayali, “France Warns against Killing a European ChatGPT,” *Politico*, June 6, 2023, <https://www.politico.eu/article/france-warns-eu-parliament-against-killing-a-european-chatgpt>.

²⁸⁵ *Le Monde* and Agence France-Presse, “Macron Argues against ‘Punitive’ AI Regulation,” *Le Monde*, November 17, 2023, https://www.lemonde.fr/en/european-union/article/2023/11/17/macron-argues-against-punitive-ai-regulation_6264452_156.html.

²⁸⁶ Digital Europe, “Europe 2023: A Digital Powerhouse” November 2023, <https://cdn.digitaleurope.org/uploads/2023/11/DIGITAL-EUROPE-MANIFESTO-2024-FULL.pdf>.

When it comes to industrial policy—both in general and in relation to AI—the EU needs to decide which comes first: setting rules of the road that promote an economy and market structure in line with European values, or sacrificing these in an attempt to gain global market share. The (ultimately unsuccessful) effort to exempt foundation models from the AI Act was a clear manifestation of this tension, but it is far from the only one. For example, the EU’s competition regime is facing growing pressure from governments and commercial interests that want to see it applied more lightly to European actors—in telecoms and rail, for example—in order to enable consolidation that they claim will strengthen Europe’s global competitiveness.

A related risk is that a narrow deregulatory vision of competitiveness, combined with fragmentation in the EU’s regulatory framework and zero-sum competition between member states, fuels a race to build up national champions that undermines the EU’s single market while rewarding well-connected corporations and worsening market concentration. Here again, the fraught negotiations on the AI Act are instructive, given the role of French and German AI “champions” in lobbying their governments for preferential treatment. And while Intel is not a European company per se, the €10 billion in subsidies it received from the German government has raised the worrying prospect of an intra-EU subsidy race on semiconductors. One obvious antidote would be to create additional funding for industrial policy at the EU level, but this has so far been opposed by member states.

More fundamentally, there is a need to challenge the notion that less or weaker regulation naturally leads to greater competitiveness. For example, strict rules on AI safety can provide the public trust needed for mass uptake of AI technologies, while aggressive antitrust enforcement can create the conditions needed for the emergence of globally competitive European companies. And many other types of positive state intervention have a role to play in increasing global competitiveness, including subsidies, public procurement, and investment in infrastructure and education. This suggests that the problem is less the notion of competitiveness itself, and more how the term is defined—and potentially captured—by powerful actors.

Fortunately, there is also a more optimistic way to look at Europe’s renewed interest in industrial policy. Instead of undercutting regulation, increasing market concentration, and fueling a race to the bottom on standards, a progressive

paradigm on industrial policy could be used to steer Europe's economy and technology sector in a more socially beneficial direction. This would entail using tools—including subsidies, taxation, competition policy, and digital regulation—in a joined-up way to promote overarching policy objectives, from ensuring technology is developed and rolled out in a human centric way to promoting a more open and decentralized digital economy.