# Barreling Towards "Significant Misalignment": A Comparative Examination of AI Regulation In The European Union And United States

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#### **Abstract**

As artificial intelligence technologies threaten drastic change, governments around the world have implemented different strategies regarding their regulation. Despite the European Union and United States' strong diplomatic and military alliance, dynamic trade relationship, and broadly aligned commitment to liberal democracy, the two powers have taken drastically different regulatory approaches to AI. In this paper, I conduct a comparative qualitative analysis of the defining characteristics of each government's AI policies and how their actions reflect different strategies to become a global leader in the AI revolution. In general, the EU emphasizes regulation, while the U.S. emphasizes innovation and military action as means to grow and wield global influence. While the EU takes a heavy-handed approach through comprehensive and binding legislation, aiming to lead the world in laying down AI law, the U.S. has not passed equivalent federal legislation, opting for a hands-off approach and emphasizing investment in innovation to assert dominance. Both governments' policies suffer from fragmentation along different dimensions. I will consider the possible explanations for why these records differ, including differences in the actors' 1) fundamental approaches to regulation and strategies for global leadership on AI; 2) regulatory capacities; and 3) legislative agenda-setting, political polarization, and gridlock. Ultimately, considering the EU and U.S. predominance on the global stage, the direction of their strategies and level of cooperation could shape the future of AI.

Henry Kissinger, "How the Enlightenment Ends," The Atlantic, June 2018

<sup>&</sup>quot;The U.S. government should consider a presidential commission of eminent thinkers to help develop a national vision. This much is certain: If we do not start this effort soon, before long we shall discover that we started too late."

# **Background**

As artificial intelligence creeps into all areas of life, its potential for disruption is becoming clear. An artificial intelligence system is "a machine-based system that is designed to operate with varying levels of autonomy and that may exhibit adaptiveness after deployment, and that, for explicit or implicit objectives, infers, from the input it receives, how to generate outputs such as predictions, content, recommendations, or decisions that can influence physical or virtual environments". More simply, AI systems are able to perform tasks that mimic human intelligence. Publicly available large language models and other types of generative AI models like ChatGPT and Dall-E have rapidly expanded the public's awareness of AI systems' power and wide application.

AI's rapid development and disruptive potential bring great risks. AI is already causing major job displacement due to automation, infringements on privacy through surveillance and the processing of personal data,<sup>2</sup> enhanced cyberattacks and scams,<sup>3</sup> reinforcement of discrimination and bias, intellectual property violations, and the uncontrollable spread of disinformation and misinformation.<sup>4</sup> A digital divide is emerging in which the costs and benefits of AI are not equitably distributed across social and economic lines<sup>5</sup>. On the latter point, Cupać and Sienknecht (2024) warn of harm to democratic governance caused by AI-imposed limitations to people's participation in the democratic process or the violation of individual rights, contributing to fragmentation, polarization, distrust, and political apathy. Concerns about AI-generated and disseminated disinformation and divisive discourse plague crucial elections around the world, including large democracies like the U.S., EU, and India, making AI's effect on democracy of particular concern. AI can instigate both individual-level and systemic harm, disrupting entire societies—when wielded by groups like terrorist cells, but also by states and corporations that levy existing power to direct emerging technologies towards abusive ends.

In the face of this pressing transformation, both national and supranational democratic governments play a role in directing AI systems towards positive uses for their citizens and protecting democratic values such as human rights, freedom of expression, privacy, and democratic participation. Governments have recently rushed to formulate AI action plans in a sort of "AI summer" 6. Over 70

<sup>&</sup>lt;sup>1</sup> Regulation 1689/2024

<sup>&</sup>lt;sup>2</sup> At the beginning of 2024, Walmart, Starbucks, and other U.S. and European companies were found to be using artificial intelligence-powered analytics tools to monitor employee activity and flag impermissible behavior (Field, *How Walmart, Delta, Chevron and Starbucks are using AI to monitor employee messages*).

<sup>&</sup>lt;sup>3</sup> Also last year, a finance worker at a multinational firm in Hong Kong was tricked into paying over \$24 million to scammers after being tricked by a video conference with multiple deepfake recreations of other members of staff (Chen, *Finance worker pays out \$25 million after video call with deepfake "chief financial officer*).

<sup>&</sup>lt;sup>4</sup> New Hampshire voters were targeted by an AI-generated voter suppression campaign, with a robocall mimicking President Joe Biden urging them no to vote in the state's primary (Feathers, Feathers, *Man Behind Biden Deepfake Robocalls*).

<sup>&</sup>lt;sup>5</sup> Van Dijk, *Digital Divide*, 1-11

<sup>&</sup>lt;sup>6</sup> Kerry, The good, the not-so-good, and the ugly

countries have developed AI strategies since 2017, and the Council of Europe has cataloged 450 AI governance initiatives around the world. Multilateral organizations like the G7, OECD, African Union, and UN have also adopted guidelines or agreements. Smuha (2019) writes of a "race to regulation" as countries hurry to beat each other to set AI standards likely to become the global norm<sup>7</sup>.

This paper focuses on the EU and U.S., which maintain an annual trade and investment relationship of upwards of \$1 trillion and are the two largest economies in the world<sup>8</sup>. The democratic allies form a strong counterbalance to the rising influence of autocratic powers like China, which is also pursuing accelerated AI innovation. While the EU lags behind China and the U.S. in AI technical innovation—its level of AI patents and investment in AI pales in comparison to the two leaders—it is handily winning the regulation contest, with multiple landmark laws forming an initial web of regulation of AI systems<sup>9</sup>. The U.S., while leading in innovation, is behind in developing and implementing regulation. This paper will address several questions: Why has the U.S. not moved to regulate AI at the same pace as Europe? In what ways is this a reflection of diverging visions of how AI should exist in each society and different orientations towards regulation as a whole? How do each of these powers define victory and the path to victory in the global competition for AI predominance?

This paper uses key characteristics of EU and U.S. AI policies to construct the overarching strategies guiding each power's aspirations for global technological leadership. The EU's heavy-handed approach (regulating heavily and broadly) reflects aspirations to export its own standards around the world, while the U.S. looks to advance national supremacy by using government spending and non-regulation to promote innovation and defense priorities. This paper also investigates the underlying drivers of these different strategies. It begins to explore as possible causes the regulatory traditions and national strategies for global leadership on AI, the legal regulatory capacities, and features of the political systems and climates, including legislative agenda-setting, political polarization, and gridlock.

# Comparing EU and U.S. approaches to AI regulation

The EU and U.S. share general guiding principles in their approaches to AI. This is the result of periods of collaboration largely facilitated by the Trade and Technology Council (TTC), a forum for transatlantic cooperation established in 2021, as well as a foundation of existing dialogue across sectors and shared democratic principles<sup>10</sup>. The governments have coalesced around values such as transparency, fairness, safety, and accountability as goals for AI policies. Engler (2023) writes that recent documents passed by each jurisdiction "[show] near perfect overlap" in prioritizing risk management and creating "trustworthy AI" (Contrasting Approaches section, para. 1). The TTC has facilitated a handful of shared (albeit limited) projects to advance trustworthy AI and establish international AI standards around these values. Most notably, the TTC published the "Joint Roadmap on Evaluation and Measurement Tools for

<sup>&</sup>lt;sup>7</sup> Smuha, From a "Race to AI" to a "Race to AI Regulation"

<sup>&</sup>lt;sup>8</sup> Hamilton and Quinlan, *The Transatlantic Economy* 

<sup>&</sup>lt;sup>9</sup> Lu, Visualizing AI Patents by Country

<sup>&</sup>lt;sup>1</sup> Regulation 1689/2024

<sup>&</sup>lt;sup>10</sup> Engler, The EU and U.S. diverge on AI regulation

Trustworthy AI and Risk Management," which points towards common terminology and a common knowledge base for the technology. This is a step towards harmonizing regulatory standards across jurisdictions, an important measure considering the strong flow of transatlantic trade and companies that operate in both the EU and U.S.<sup>10</sup>.

However, below this high-level collaboration, EU and U.S. AI regulation sharply diverges. Engler (2023) writes that the governments are headed towards "significant misalignment" (Emerging Challenges section, para. 2). I argue that these points of divergence shape two distinct strategies to advance supranational and national leadership in AI.

# The European Union

Legislation: The EU, a body known for a strong regulatory culture, takes a comprehensive and coordinated approach to AI, with binding rules that attempt to implement a single regulatory framework across member states. The backbone of the framework is made up of the General Data Protection Regulation (GDPR), a 2018 privacy law that governs the collection and processing of personal data of EU citizens; the Digital Services Act (DSA) and Digital Markets Act (DMA), 2022 regulations that regulate large online platforms; and the Artificial Intelligence Act (AIA), the world's first legal framework on AI.

The AIA was passed in March of 2024 and imposes requirements and obligations on developers and deployers of AI, regulating AI within the European common market. The AIA categorizes AI systems according to their risk level (ranging from "unacceptable" to "minimal") and imposes tiered bans, limitations, and requirements that systems must meet to enter the EU market. Unacceptable systems threaten people's "safety, livelihood and rights," including social scoring and categorization systems and voice assistance that encourages dangerous behavior. High and limited risk systems fall in the middle, and minimal risk systems, like AI-enabled video games and spam filters, face no limitations. The AIA also levies greater obligations on large providers of general-purpose AI (i.e. those not constrained to a particular sector, like the large language model ChatGPT) that pose "systemic risk," or the potential for widespread negative impacts on society as measured by model capabilities<sup>1</sup>.

The AIA relies on the existing New Legislative Framework, which regulates the entry of consumer products into the EU internal market, to explicitly lay down rules for commercial activity that involves AI systems, in addition to national governments<sup>11</sup>. The AIA, GDPR, DSA, and DMA all spell out large fines for noncompliance<sup>1</sup>.

#### Strategy

This heavy-handed approach reflects a government AI strategy resting on two pillars: elevating "safe" AI via regulation of the private sector and exporting EU standards globally via the "Brussels effect."

<sup>&</sup>lt;sup>1</sup> Regulation 1689/2024

<sup>&</sup>lt;sup>11</sup> Mueller, The Artificial Intelligence Act

#### "Safe" AI

Unlike the U.S., which largely avoids grazing the extremely profitable tech giants that call Silicon Valley home, Europe takes aim at private companies that develop and use AI. The EU's overarching digital regulatory framework specifically targets large companies. The DSA, for example, only applies to "very large online platforms and search engines," defined as those that have over 45 million monthly users, while the DMA's express purpose is to ensure the fair behavior of large "gatekeeper" online platforms that have a "significant impact" and "entrenched and durable" position in the common market and a large user base<sup>12</sup>. This strategy could be a competitive advantage over the U.S. With public wariness of the dangers of AI on the rise, "made in Europe" systems that are trustworthy, ethical, and developed with transparency, democracy, diversity, and fairness in mind could prove desirable.

## **Brussels Effect**

The EU also leverages its position as a regulatory powerhouse by getting ahead on setting rules that are likely to go global. The "Brussels effect" is a phenomenon in which multinational companies wishing to do business in the EU must adhere to the European market's strong regulatory standards and then, to level the playing field against domestic competitors that do not have to standardize their production in this way, lobby their own domestic government to enact the same rules as the EU<sup>13</sup>. A 2021 revision to an earlier iteration of the AIA included a major change in scope, reflected in this added provision: "In light of their digital nature, certain AI systems should fall within the scope of this regulation even when they are neither placed on the market, nor put into service, nor used in the Union"<sup>14</sup> This line explicitly makes the legislation's enforcement scope global.

Anu Bradford (2012) makes a strong case for the power of the Brussels effect as a defining aspect of EU influence. The EU already determines and exports its own regulatory standards around the world, enabling it to wield great influence over global commerce largely unchecked by other states. In the digital realm, this is demonstrated by the dozens of copycat laws based on the EU's General Data Protection Act (GDPR) that have sprung up around the world<sup>15</sup>. The EU has laid down laws that already affect content with which U.S. consumers interact on a daily basis—cookie banners on most websites, for example, are one result of the

#### GDPR.

The EU sees itself in a race to regulate so that it can set the universal rules, hoping that through the trade and lobbying that churn the wheels of the Brussels effect, Europe's own preferences will become the international standard. Regulation can, through this view, be a competitive advantage, a tool to exert control over external actors—as can supranational laws that combine the 27 individual member states into a single body that can compete on the global stage.

<sup>&</sup>lt;sup>12</sup> European Commission, The Digital Services Act package

<sup>&</sup>lt;sup>13</sup> Bradford, The Brussels Effect

<sup>&</sup>lt;sup>14</sup> Kazim et al. *Proposed EU AI Act* 

<sup>&</sup>lt;sup>7</sup> Smuha, From a "Race to AI" to a "Race to AI Regulation"

<sup>&</sup>lt;sup>15</sup> Countries that have adopted similar laws include the UK, Japan, Singapore, Brazil, and South Africa.

## **Fragmentation**

However, this supranational strategy may be compromised by uneven enforcement at the level of member states. The AIA applies across the EU, but the legislation's enforcement capabilities are significantly fractured by the reliance on member states—practically ensuring inconsistent levels of enforcement, levels of compliance by companies, and results for citizens across states.

In the EU, policy areas are grouped into different categories of competences, where the supranational government either has exclusive power, shares its power with national governments, or merely supports actions on which national governments take the lead. The EU has exclusive competence regulating its internal market, including the standards to which products must conform before entering the market. But the competences regarding AI are not yet defined; the AIA does not clearly determine how far member states can go in enacting their own legislation on AI<sup>7</sup>.

At the EU level, the AIA established the Artificial Intelligence Office to supervise compliance with restrictions on general-purpose AI specifically (including by enforcing sanctions and assisting with investigations at the member state level) and the European Artificial Intelligence Board, a scientific panel to advise on violations. At the member state level, the AIA requires member states to establish national market surveillance authorities and notifying authorities to supervise the implementation of the AIA, with the power to require providers, deployers, and importers of AI systems to provide data needed for compliance assessments, as well as take corrective action for non-compliance<sup>16</sup>. This level of reliance on member states for assessment and enforcement already results in fragmentation across jurisdictions because of uneven resource distribution and unaligned views on when and how to take action between member states. This can create confusing standards for companies that operate across national boundaries.

Further, the AIA ultimately relies on internal self-assessment by providers of high-risk AI systems in most cases (third-party assessment is required for a limited subset of systems). Providers need only self-certify that their quality management system, technical documentation, and post-market monitoring plan are aligned with AIA requirements to get their system on the EU common market. The AIA encourages users of AI systems to monitor for compliance, but it lacks an explicit right of redress for individuals or organizations affected by non-compliance by providers—in other words, they have no right to complain to market surveillance authorities or sue violators themselves.

This weak private enforcement, in addition to weak public enforcement fragmented across member states, compromises the AIA's theoretical uniformity. So, while the EU has a single set of supranational laws regulating AI, the enforcement regime suffers from fragmentation, jeopardizing the EU's ability to serve as an international model of top-down regulation. A fragmented enforcement regime could lead to some member states moving forward with responsible innovation for their citizens, while others across national borders are unable to attract investment and could suffer from more irresponsible uses of AI by private companies, not to mention potential abuses by national governments. This could limit the EU's strategy to take the lead on AI, as its "model" standards may not prove replicable or workable in other jurisdictions.

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<sup>&</sup>lt;sup>16</sup> Werkmeister et al. EU AI Act unpacked

#### The United States

Legislation: Existing U.S. AI regulations are far from comprehensive. Federal regulatory efforts have been initiated largely by White House, with a handful of executive orders from the Trump and Biden administrations. A 2019 Executive Order directed federal agencies to boost AI research and development and articulated several priorities, including developing and deploying AI systems with "the trust of the American people," ensuring proper workforce training as AI transforms the job market, and protecting national security. A second Executive Order in 2020 established principles to guide the use of AI among federal agencies, emphasizing responsible innovation; it carved out exceptions for defense and national security, common commercial products, and research and development. Both orders directed agencies to produce priorities, standards, and reports, but neither included binding, enforceable rules or targeted the private sector. The National Artificial Intelligence Initiative (NAII) Act of 2020 was rolled into the National Defense Authorization Act of FY 2021 and begins to direct AI activity within federal agencies.

The Biden administration released the *Blueprint for an AI Bill of Rights* (AIBoR) in October of 2022. It outlines rights to which citizens are entitled as AI advances technically, as well as AI's risks. It lays out five principles to guide the design, use, and deployment of systems, including safety, protecting from discrimination, and privacy<sup>20</sup>. A year later, Biden signed the Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence. It homes in on the dangers of AI-generated content, requiring the Department of Commerce to develop guidance in partnership with the private sector on creating labeling and watermarking tools for federal agencies to make clear to Americans that communications from the government are authentic (Exec. Order No. 14110, 2023).

The U.S.'s policies provide essentially *zero specifics* on enforcement, merely directing federal agencies to develop best practices and relying on voluntary industry cooperation. The EO calls on the National Institute of Standards and Technology (NIST) to set standards for "red teaming," which enable developers to find flaws in their systems, but does not require that companies adhere to these standards or NIST testing methods (Exec. Order No. 14110, 2023). The EO has a single binding rule: it invokes the Defense Production Act, a 1950 law that enables the federal government to intervene in commercial production in times of emergency, to require companies developing new AI models of a certain caliber to share the results of safety tests with the federal government when training new systems that could threaten national security. This provision, however, only applies to new models being developed, not those that have already been launched (Exec. Order No. 14110, 2023).

## **Strategy**

The American regulatory regime is more fragmented in the formulation of legislation compared to the EU and has a nonexistent overarching enforcement system, with almost wholly non-binding rules. The U.S.'s strategy for AI strategy rests on its own distinct pillars:

<sup>&</sup>lt;sup>17</sup> Executive Order 13859, sec. 1

<sup>&</sup>lt;sup>18</sup> Executive Order 13960

<sup>&</sup>lt;sup>19</sup> Parker, National Artificial Intelligence Initiative

<sup>&</sup>lt;sup>20</sup> White House Office of Science and Technology Policy, Blueprint for an AI Bill of Rights

encouragement of technological innovation and an emphasis on AI's applications in defense and national security.

## Innovation

Differential treatment of the public (hands-on) vs. private (hands-off) sectors is a notable theme of federal AI regulation, reflecting a desire to encourage technological innovation. The second Trump administration has wholeheartedly endorsed this approach<sup>21</sup>. Housing the largest startup industry in the world, the U.S. national strategy is marked by the encouragement of technological innovation and curation of a favorable startup environment. In contrast to the EU, most policies target federal agencies, rather than private companies. The White House has worked towards voluntary commitments from tech companies on product safety and public trust, reflecting a preference to lean heavily on (and emphasize as a "win" for the administration) industry-led regulation<sup>22</sup>. Large tech companies have begun to adopt their own anticipatory measures to control the regulatory regime in their favor<sup>23</sup>. On the whole, because government-set guidelines, such as NIST's AI Risk Management Framework, are solely voluntary for private companies, they all boil down to very well-informed, comprehensive pieces of advice. A lack of binding legislation unavoidably empowers the private sector.

This aspect of U.S. AI policy could be seen as aiming for a strategic advantage. The U.S.

leads private investment in AI worldwide—in 2023, the U.S. saw \$67 billion invested in the technologies, nearly nine times that of China<sup>24</sup>. 61 percent of total worldwide funding for AI start-ups goes to U.S. companies, compared to 17 percent for Chinese companies and just 6 percent for European companies. The U.S. private sector has an influence that almost completely eclipses the EU. The top five U.S. tech companies spend essentially *double* on research and development that Europe does as a whole<sup>25</sup>. Federal and state governments are eager to protect this highly profitable industry. A proposed California law implementing some safeguards for new AI models, was heavily watered down after industry input before being vetoed by Governor Newsom altogether<sup>26</sup>.

Public investment in AI in the U.S. also far outpaces Europe<sup>10</sup>. The billions of dollars the federal government has funneled into AI research and development, including a pledged \$2.6 billion from the Biden administration to fund AI infrastructure, signifies a focus on enabling development rather than establishing guardrails, an approach that spans the Biden

administration and first Trump administration. The White House published the National AI Research and Development Strategic Plan in 2016, and by 2022, 13 federal departments had funded AI R&D<sup>10</sup>. Perhaps most indicative of the U.S.'s prioritization of innovation is that the 2022 *CHIPS and Science Act*, which allocates \$280 billion to fuel the domestic research and manufacturing of semiconductors, an integral component of AI systems, is the most comprehensive federal law directly regarding AI currently on the

<sup>&</sup>lt;sup>21</sup> O'Brien and Parvini, *Trump signs executive order*, para. 5

<sup>&</sup>lt;sup>22</sup> The White House, *Fact Sheet* 

<sup>&</sup>lt;sup>23</sup> Apple, Apple announces changes to iOS, Safari, and the App Store

<sup>&</sup>lt;sup>10</sup> Engler, The EU and U.S. diverge on AI regulation

<sup>&</sup>lt;sup>24</sup> Stanford University, Artificial Intelligence Index Report 2024

<sup>&</sup>lt;sup>25</sup> European Commission, *The future of European competitiveness* 

<sup>&</sup>lt;sup>26</sup> Allyn, California Gov. Newsom vetoes AI safety bill

books<sup>27</sup>. It is important to note that such investment in the U.S. is coupled with little regulation, whereas public funding in the EU is both less in dollar terms and intertwined with heavier—if fragmented—regulation.

While compromising safety standards, the U.S.'s emphasis on innovation has enabled it to run far ahead of Europe in the tech economy. The tech sector accounts for essentially the entire productivity gap between the EU and U.S.<sup>25</sup>. While the U.S.'s national leadership in innovation began with public R&D during the Cold War, the emphasis has shifted towards shaping a more favorable environment for private innovation, especially with the rise of Silicon Valley as a tech powerhouse and the internet revolution in the '90s<sup>28</sup>. The U.S. government's light touch with respect to regulating the internet was complemented by a concentration of venture capital available for start-ups that produced today's leading tech companies—Meta, Amazon, Google, Microsoft, and Apple. In contrast, Europe suffers from a lack of later-stage financing (i.e. venture capital) for start-ups that would enable them to scale, which has led many European companies to move to the U.S. The academic and commercial sectors are also more integrated in the U.S., creating highly profitable innovation clusters, while in Europe much academic research is never commercialized<sup>23</sup>. The U.S.'s leading innovation environment is a major factor in its ability to determine AI's future.

Europe is majorly threatened in this regard. A major EU Commission report by Mario Draghi, former Italian Prime Minister and ex-President of the European Central Bank, was recently released on Europe's economic future amidst slowing growth. It identifies a neglect of digital innovation as a main driver of lagging productivity. There are no EU companies valued at over 100 billion euros that were founded within the last 50 years, while all six U.S. companies valued above one trillion euros have been founded during this period. Nearly 30 percent of European-founded "unicorns" moved abroad between 2008 and 2021, with the vast majority relocating to the U.S. The report claims that Europe's regulatory burdens and weak venture capital sector hinder start-ups from scaling up, which leads to their relocating to the more favorable American environment<sup>23</sup>. While the U.S. has successfully ushered in leadership in the emerging tech industry, Europe's industrial structure has remained solidly rooted in the automobile and pharma industries. Europe is at risk of being overly influenced by American technology companies that are, according to the European Parliament, "increasingly seen as dominating entire sectors of the EU economy" 29.

The U.S.'s favorable entrepreneurial environment during the first digital revolution produced the tech giants of today. This fact, combined with this disparity in the concentration of innovation, entails more than bragging rights for the U.S. The biggest American tech companies own practically all the essential digital infrastructure in the U.S. and Europe, which puts them in the position to control data use and privacy, the flow of information, the media ecosystem, advertising, and product development<sup>30</sup>. Already, major tech companies are threatening to suspend some products in the EU, citing regulatory concerns; Meta, for example, did not launch its upcoming multimodal AI model in the EU because of "the

<sup>&</sup>lt;sup>27</sup> Badlam et al. The CHIPS and Science Act

<sup>&</sup>lt;sup>28</sup> Atkinson, Understanding the U.S. National Innovation System

<sup>&</sup>lt;sup>29</sup> Roberts et. al. Achieving a "Good AI Society. 68"

<sup>&</sup>lt;sup>30</sup> Rowlands, We Need to Rewild the Internet

unpredictable nature of the European regulatory environment," a signal that U.S. and EU policies could further concentrate tech industry activity in the U.S.<sup>31</sup>

## Defense

The U.S. also distinguishes itself through a strong emphasis on defense and national security regarding AI, implementing layered protections against foreign influence with a focus on combating China and Russia. The National Artificial Intelligence Initiative Act of 2020 was enacted as part of that year's National Defense Authorization Act, which authorizes funding for the Department of Defense and other defense-related activities (NIST, 2023). Biden's Executive Order on AI invokes the Defense Production Act to require that companies deploying advanced AI report the results of vulnerability tests to the federal government. The policy is specifically concerned with preventing the use of technologies by hostile actors to develop biological or nuclear weapons. The provisions about watermarking AI-generated content reflect a concern with foreign influence in democratic elections<sup>32</sup>

In an economic sense, the U.S. is concerned with protecting its own markets and reducing interdependence on China. Last year, the Biden administration announced further export restrictions on American semiconductors to limit China's AI development<sup>33</sup>. The White House is taking these actions alongside rising private sector concerns with espionage by authoritarian countries targeted at Silicon Valley<sup>34,35</sup>.

The U.S. is also scrambling to win the AI arms race. There is concern from the intelligence community that AI systems "pose grave security challenges for which [the United States is] currently unprepared, including the development of novel cyber weapons, large-scale disinformation attacks, and the design of advanced biological weapons" have been driven solely by defense spending. The growth in AI federal contracts between 2022 and 2023 was dominated by the Department of Defense (DoD), such that in 2023, 95 percent of potential future AI contract value in the entire federal government was concentrated in the DoD. NASA and the Department of Health and Human Services, the agencies in distant second and third place, increased their own contract values modestly, but their share of the total federal AI contract potential value fell significantly because of the DoD's 1,500 percent increase in just a year. The DoD now serves as the main incubator in the federal government for AI projects, reflecting a longstanding pattern of its heavy investment in emerging technologies. The growth

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<sup>&</sup>lt;sup>31</sup> Weatherbed, Meta won't release its multimodal Llama AI model in the EU

<sup>&</sup>lt;sup>32</sup> Executive Order No. 14110

<sup>&</sup>lt;sup>14</sup> Kazim et al. *Proposed EU AI Act* 

<sup>&</sup>lt;sup>33</sup> Plotinsky and Cinelli, Existing and Proposed Federal AI Regulation

<sup>&</sup>lt;sup>34</sup> Altman, Who Will Control the Future of AI?

<sup>&</sup>lt;sup>35</sup> While the U.S. has typically taken the lead on economic sanctions against China, Europe has also recently implemented restrictions on Chinese investment. The EU recently declared that emerging technologies must not be used to "enhance the military or repressive capabilities of 'systemic rivals,'" i.e. China.

<sup>&</sup>lt;sup>36</sup> Congressional Research Service, *Artificial Intelligence*, 6-7

in contract size might reflect a shift to large-scale implementation, enabled by AI's rapid advancement<sup>37</sup>. That the military is at the forefront of public sector AI investment and innovation is a particularly unique feature of the U.S. in contrast to the EU<sup>38</sup>. A 2021 revised draft of the Artificial Intelligence Act, for example, added a blanket exemption for AI in the context of national security, explicitly relinquishing control over national security to the member states<sup>14</sup>.

A major driving force behind this dimension is a desire to combat the rising influence of China and Russia, each of whom released their own national AI plans in 2017 and 2019, respectively<sup>39</sup>. "It's important to remember that the enemy gets a vote," said retired Air Force Lt. Gen. David Deptula, emphasizing that any change of pace in U.S. military research and development on AI must contend with China and Russia<sup>40</sup>.

Modern warfare increasingly involves AI; Ukraine, for instance, has become a sort of "Silicon Valley" of autonomous drone technology in its fight against Russia<sup>41</sup>.

In 2023, the Pentagon released its AI adoption strategy<sup>42</sup>. At the beginning of this year, Michael Horowitz, Deputy Assistant Secretary of Defense for Force Development and Emerging Capabilities, announced several new AI initiatives and investments. Defense applications for AI include intelligence gathering and surveillance, battlefield planning, logistics, cybersecurity and cyber warfare, weapons systems, and semi-autonomous and autonomous vehicles<sup>43</sup>. The latter are a major focus of both the U.S. and China—a Georgetown University report found that over one third of contracts awarded by the U.S. military and Chinese military each went towards autonomous vehicles, including aquatic anti-submarine patrols and aerial<sup>40</sup>. The Pentagon recently announced the Replicator initiative, which aims to deploy thousands of autonomous systems across the military over the next two years to counter China's armed forces build-up<sup>44</sup>. Stuart Russell, an AI scientist and professor at the University of California, Berkeley, warned of the impending shift in warfare: "There will be weapons of mass destruction that are cheap, scalable and easily available in arms markets all over the world"<sup>38</sup>.

# Fragmentation

In contrast to the EU, where fragmentation occurs upon implementation, in the U.S., the very policy formulation process for AI regulation suffers from fragmentation, resulting in domain competition that stalls action. There is still plenty of room for federal agencies to grapple for authority over certain issues. (Should control over wireless standards, for instance, be determined by the Federal Trade Commission, Department of Justice, or Federal

<sup>&</sup>lt;sup>37</sup> Henshall, U.S. Military Spending on AI Surges

<sup>&</sup>lt;sup>38</sup> However, NATO has released multiple AI strategies over the last few years (NATO, *Summary of NATO's Revised Artificial Intelligence Strategies*)

<sup>&</sup>lt;sup>39</sup> Bekzod, *Building the Future* 

<sup>&</sup>lt;sup>40</sup> Hirsh, *How AI will revolutionize warfare*, para 18

<sup>&</sup>lt;sup>24</sup> Stanford University, Artificial Intelligence Index Report 2024

<sup>&</sup>lt;sup>41</sup> Mozur and Satariano, A.I. Begins Ushering In an Age of Killer Robots

<sup>42</sup> Clark, DOD Releases AI Adoption Strategy

<sup>&</sup>lt;sup>43</sup> Konaev et al. U.S. and Chinese Military AI Purchases

<sup>&</sup>lt;sup>44</sup> U.S. Department of Defense, *Defense Innovation Official Says Replicator Initiative Remains On Track* 

Communications Commission?) It is even unclear which congressional committees should take up which issues.

Just days into his second term, Trump rescinded Biden's Executive Order on AI, eliminating one of the few pieces of federal AI legislation in place. But the lack of enforcement power and uncertain longevity across presidential administrations ultimately point to a stark lack of successful congressional action. In light of federal stagnation, states have begun to take matters into their own hands. In 2023 alone, over 30 AI bills were introduced in state legislatures across the country, though just Connecticut and Texas passed laws<sup>24</sup>. In May of 2024, Colorado enacted the *Colorado AI Act*, the first state-level, comprehensive AI legislation that establishes responsibilities for AI developers and employers <sup>45</sup>. The California Consumer Privacy Act is heavily based on Europe's General Data Protection Regulation and restricts the use of automated decision-making tools<sup>45</sup>. Ultimately, the U.S. has an uneven state-level legislative landscape that is not being evened out at the federal level.

# Why are these approaches different?

I will now propose underpinning factors that drive these divergent strategies. The EU and U.S. AI regulatory frameworks differ because of differences in the European and American 1) fundamental approaches to regulation and strategies for global leadership on AI; 2) legal regulatory capacities; and 3) legislative agenda-setting, political polarization, and gridlock.

# Fundamental approaches to regulation

The EU, concerned with collective wellbeing and greater equity in social and economic policies—perhaps best exemplified in its Charter of Fundamental Human Rights' commitment to "a peaceful future based on common values"—is quicker to regulate emerging technologies to prevent harmful and uneven impacts of AI<sup>46</sup>. The U.S. prides itself on maximizing individual freedom and laissez-faire economic principles, placing fewer restrictions on profitable sectors to promote innovation. (It seems to be going full steam ahead with simply innovating more as a way to overcome any potential problems with AI, reminiscent of a content moderation approach that prioritizes "more speech" rather than restrictions on speech.) Roberts et al. (2021) argue that these differences reflect a more fundamental divergence in how the two governments view AI's role in society.

These vast differences in the EU and U.S. approaches to AI are anchored in long-standing cultural and economic beliefs and pulled forward by differing ambitions and visions for the future, as articulated in key policy documents from each government. EU communications on AI emphasize "European values" and collective well-being; the EU Commission's 2020 White Paper on Artificial Intelligence that served

<sup>&</sup>lt;sup>45</sup> White & Case LLP, AI Watch: Global regulatory tracker - United States

<sup>&</sup>lt;sup>21</sup> O'Brien and Parvini, *Trump signs executive order*, para. 1

<sup>&</sup>lt;sup>32</sup> Executive order 14110, sec. 1

<sup>&</sup>lt;sup>45</sup> White & Case LLP, AI Watch: Global regulatory tracker - United States

<sup>&</sup>lt;sup>46</sup> Charter of Fundamental Rights of the European Union, Preamble

as a precursor to the AI Act articulates a goal "to position Europe as a global leader in trustworthy AI, ensuring that AI systems are developed and used in a way that respects fundamental rights and contributes to societal well-being"<sup>47</sup>. A European tradition of a reliance on government intervention in the free market, and, more fundamentally, a greater comfort with promoting group well-being over individual liberty, leads the EU to treat its regulations as vehicles to export its influence around the world.

Conversely, documents from the first Trump administration almost wholly focus on research and development, and Biden's 2023 Executive Order aims "governing the development and use of AI safely and responsibly" The second Trump administration rescinded Biden-era AI policies on the grounds that they "act as barriers to American AI innovation" In fact, it seems that no American communication or document on AI asserts a need for regulation without mentioning innovation in the same breath. Senator Ted Cruz (R-TX), for example, expressed strong contempt for government overreach in AI regulation, espousing the importance of a "free enterprise system" that "allows Americans to freely pursue their ideas, grow their own businesses, and compete without having to obtain permission from all-knowing bureaucrats" He disparaged "the European model, where government technocrats get to second-guess and manage perceived risks with economic activity" Even as lawmakers propose guardrails to promote the responsible development and deployment of AI, there is an underlying sentiment that regulation must not slow down the tech industry. This mindset demands a more streamlined flow of capital encouraged by the removal of red tape, not the erection of it.

Additionally, the U.S. is preoccupied with maintaining its threatened lead on AI as a facet of its broader competition with China, which it perceives as a greater threat than the EU does. And the U.S.'s tendency to empower the DoD to take the lead on public sector innovation (the advent of the early Internet is a major example) explains why federal AI spending is being funneled into the agency. In contrast, the EU's delegation of defense responsibilities to its member states explains why major supranational policies on AI have lacked a military aspect.

These differences in regulatory tradition and strategy to promote each government's global leadership on AI frame the disparate outcomes in AI regulation, making up the big picture that informs the smaller mechanics of lawmaking.

# Different regulatory capacities

EU and U.S. authorities also have different legal power to impose regulations. The EU's AIA explicitly gives the newly established national market surveillance authorities in each member state the power to monitor and sanction the implementation of the legislation. Though problems of fragmentation and developer self-assessment remain unresolved, these authorities at least have the clear jurisdiction to handle the implementation of the AI Act<sup>16</sup>. In the U.S., federal agencies' power to regulate AI is weak and almost wholly undefined. Engler (2023) notes that in no sector does any U.S. federal agency have the necessary legal authority to enforce all of the principles outlined in Biden's AI Bill of Rights. This lack of

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<sup>&</sup>lt;sup>47</sup> European Commission, White Paper on Artificial Intelligence

<sup>&</sup>lt;sup>10</sup> Engler, The EU and U.S. diverge on AI regulation

<sup>&</sup>lt;sup>48</sup> Commerce Dems, *Hearing: The Need to Protect Americans' Privacy and the AI Accelerant*, 14:14–14:27 and 14:42-14:50

clarity forces agencies to venture into uncharted territory with regulatory actions, blindly attempting to apply existing authority to AI systems and hoping that their actions will not be struck down. Lawrence et al. (2022) find that only five of 41 major federal agencies had created an AI plan as required by the White House as of December 2022<sup>49</sup>. Further, the lack of a centralized approach and the reliance on voluntary guidance has resulted in an uneven response across federal agencies, and a lack of clear jurisdiction leads agencies to battle over authority to regulate in different areas<sup>10</sup>.

The tech regulatory environment in the U.S. is also heavily influenced by its legal protections of free speech. The U.S. has a First Amendment, while the EU does not, and the latter is therefore much more willing and able to put restrictions on speech that might be considered harmful, like hate speech and disinformation, than the U.S. This has implications for content moderation on social media platforms. The EU's *Digital Services Act* (DSA), for instance, governs online platforms by holding them liable for illegal content they host, while Section 230 of the Communications Decency Act in the U.S. establishes the opposite rule. It carves out an exception for social media platforms, stating that if they make a good effort to moderate, they are not responsible for user-generated content<sup>50</sup>. The DSA is not possible in the U.S. because it directly conflicts with the First Amendment, and this has implications for AI because AI affects the content and interaction of users online<sup>51</sup>. The DSA also imposes "systemic risk" obligations on large online platforms and search engines that fishtail with the AI Act's language<sup>51</sup>.

Regulatory capacity is important because when the legislature is gridlocked, as discussed in the next section, regulatory agencies gain freedom and power to implement and enact rules. Ferejohn and Shipan (1990) call this "bureaucratic drift," as regulators can more easily pursue their own policy objectives without fear of legislative override. Europe's stronger culture of regulation enables this phenomenon to make up for gridlock, while in the U.S., weakened federal agencies are unable to take action amidst gridlock<sup>52</sup>.

The U.S. also uniquely suffers from judicial intervention that nullifies actions taken by the President, Congress, and the states. Crucially, two recent Supreme Court rulings struck down the long-standing ability of agencies to interpret broad laws passed by Congress, dramatically curbing the power of U.S. federal regulatory agencies. The decisions are likely to have far-reaching effects—Justice Elena Kagan warned that the rulings "will cause a massive shock to the legal system"—as they empower companies to overload agencies with legal challenges to regulations that would previously have been upheld without question<sup>53</sup>. This change is of particular concern with regards to AI, a rapidly advancing technology marked by low public literacy and highly susceptible to abuse by private companies.

# Legislative agenda-setting, polarization, electoral systems, and gridlock

Thus far, I have discussed the EU and U.S. as powerful, monolithic actors, but thousands of decision-makers chart each government's course. The progress towards enacting binding legislation has

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<sup>&</sup>lt;sup>49</sup> Lawrence et al. *Implementation Challenges to Three Pillars of America's AI Strategy* 

<sup>&</sup>lt;sup>50</sup> Bradford, Whose AI Revolution?

<sup>&</sup>lt;sup>51</sup> Regulation 2065/2022

<sup>&</sup>lt;sup>52</sup> Ferejohn and Shipan, Congressional Influence on Bureaucracy

<sup>&</sup>lt;sup>53</sup> Howe, Supreme Court strikes down Chevron

been greatly determined by each body's legislative process. In the EU, the Commission sets the legislative agenda, and policies must be ratified by the European Parliament (made up of elected parliamentarians from each member state) and Council of the EU. The AIA, for instance, took years to develop and went through multiple iterations before its final passage. The European Council first raised concern about AI in 2017, a High-Level Expert Group on AI was convened in 2018, and the EU Commission published non-binding ethics guidelines in 2019. In February of 2020, the Commission put out a White Paper on Artificial Intelligence and invited public consultation from interested stakeholders<sup>47</sup>. It solicited 1,215 contributions, from which it produced a draft proposal. The Commission proposed the original version of the AIA in April of 2021, and later that year, EU member states and other stakeholders made several revisions to it<sup>54</sup>.

In the U.S., individual members of Congress initiate bills that must make their way through both the House of Representatives and the Senate and be signed by the President. It is perhaps the single decision-making body of the EU Commission, staffed by experts and EU ministers and operating under the direction of a single President, that has enabled Europe to roll out major pieces of AI legislation. On the U.S. side, lawmakers and their staffs naturally may have a difficult time setting legislative priorities around AI and communicating these priorities to their colleagues and constituents because of its highly technical nature. It is also a particular challenge that AI regulation has no natural constituency. Compared to issues like farm policy, tariffs, gun control, or health care, for example, there is no concentrated constituency in favor of AI regulation—though there is a very powerful lobby for deregulation of the tech industry, particularly at the state level<sup>55</sup>.

Congress' ability to make binding federal legislation is crucial for regulation that spans years and state borders. The U.S. has many prominent lawmakers fighting to place guardrails around AI, most notably Senate Majority Leader Chuck Schumer, whose office led the development of the Senate Roadmap on AI <sup>56</sup>. Dozens of members of Congress have introduced legislation addressing concerns about transparency in development and government use of AI, privacy concerns, intellectual property, and national security—over 120 bills to date <sup>57,58</sup>. The President can also push Congress towards action, both through direct communication and the raising of agenda items in media coverage and the State of the Union. But despite these efforts, the U.S. has seen no successful congressional action on AI (in stark contrast with the European Parliament, which overwhelmingly passed the AI Act). A few bills tangentially related to AI, such as the Kids Online Safety Act, which imposes content regulation requirements for platforms used by minors, and the DEFIANCE Act, which would punish the creation and proliferation of sexually explicit deepfakes, passed the Senate during the last congressional session but must start over in

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<sup>&</sup>lt;sup>47</sup> European Commission, White Paper on Artificial Intelligence

<sup>&</sup>lt;sup>54</sup> Timeline, *Artificial Intelligence* 

<sup>&</sup>lt;sup>55</sup> Ng, State by state, one lobbyist is reshaping American tech laws

<sup>&</sup>lt;sup>56</sup> The Bipartisan Senate AI Working Group, *Driving U.S. Innovation in Artificial Intelligence* 

<sup>&</sup>lt;sup>57</sup> Mulligan, There are more than 120 AI bills in Congress right now.

<sup>&</sup>lt;sup>58</sup> See, for example, the NO FAKES Act to protect people's digital likenesses, the Stop Spying Bosses Act to protect workers from surveillance, or the CLOUD AI Act to limit Chinese Access to American semiconductors and chips.

the new session that began in January<sup>59,60</sup>. That no standalone federal AI bills have become law is a reflection of Congress's slowing productivity on the whole. Bogged down by gridlock, fueled by political polarization, lawmaking of any sort has become increasingly challenging for the body<sup>61</sup>.

Political divisions certainly challenge the ability of the EU to govern, especially considering the difficulty of corralling 27 member states behind a single piece of legislation<sup>62</sup>. But in the U.S., frequent switches in party control of the House, Senate, and White House frequently result in divided government (flipping between parties that have less and less policy overlap), inhibiting the ability to enact complicated, comprehensive legislation that might take years of negotiations. Building a robust regulatory framework for novel technologies like AI requires repeated acts of cooperation over time and across changes in control of the government, as demonstrated by the years-long push to draft and enact the AI Act, and the even longer six-year period across which the GDPR, DSA, and DMA were separately drafted and enacted. Polarization in the U.S. amongst lawmakers has eroded the trust and patience needed for productive, long-term deliberation<sup>63</sup>.

Two-party systems like the U.S. suffer from gridlock that makes them unable to update the social safety net and regulatory frameworks<sup>64</sup>. In the U.S. two-party presidential system, excessive checks on the majority party's power to govern, through the presidential veto, a divided bicameral legislature, the filibuster, and judicial intervention are unique features that particularly contribute to gridlock<sup>64</sup>. White House initiatives, state leadership, and federal regulatory agencies' creativity can only go so far to regulate an issue that requires lasting, high-level laws. These bodies, whose actions are overwhelmingly likely to be reversed or inadequate (just as Trump immediately eliminated Biden's AI policies) are attempting to compensate for a systemically dysfunctional and unwilling Congress.

The difficulty of implementing federal restrictions on AI may influence the U.S.'s strategic emphasis on innovation and defense. As fewer pieces of individual legislation get passed in Congress, lawmakers roll their budget priorities into omnibus spending bills, and spending to encourage technological innovation is much less contentious than regulation of tech companies. With public concern with AI on the rise, there may be pressure on lawmakers to do *anything* to address the issue, and federal dollars line the path of least resistance.

# **Conclusion**

While they share the same general emphasis on fostering trustworthy AI and risk management, the EU and U.S. take two distinct approaches to global leadership on AI and AI regulation. The EU has led the world in establishing regulatory standards for the systems, implementing a risk management framework, guardrails on developers, and privacy protections through the AI Act, General Data Protection

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<sup>&</sup>lt;sup>59</sup> Ortutay, What to Know about the Kids Online Safety Act and Its Chances of Passing

<sup>&</sup>lt;sup>60</sup> Durbin and Graham, The DEFIANCE Act of 2024

<sup>61</sup> Tuholski, Institutional Gridlock in the United States Congress

<sup>&</sup>lt;sup>62</sup> Hahm, *Divided by Europe* 

<sup>&</sup>lt;sup>63</sup> Faverio, What the data says about Americans' views of artificial intelligence

<sup>&</sup>lt;sup>64</sup> Bond et al. Presidential-Congressional Relations

Regulation, and Digital Services Act. However, there is great fragmentation in uneven enforcement of legislation across member states. On the other hand, the U.S. has enacted no comprehensive binding federal legislation regarding AI, leaving guardrails up to federal agencies, the states, and industry-led efforts. The U.S. instead pursues a national strategy characterized by national security and defense concerns, which reflect a desire to combat China's rising influence, and an encouragement of private sector innovation and limited regulation. I speculate that the differences between EU and U.S. AI strategy could be motivated by existing cultural norms and attitudes towards regulation, legal capacities to regulate, and political factors, such as legislative procedure, political polarization, and gridlock.

This article's goal is not to decisively declare the superiority of either strategy, both of which have defining strengths and both of which suffer from major weaknesses. The U.S. must ensure that its handsoff approach and reliance on voluntary industry self-regulation does not end in disaster<sup>65</sup>—and in a less dire sense, must recognize that refusing to regulate now could result in it relinquishing control to the EU. It is structurally hindered in implementing regulatory controls in a way that the EU is not; a gridlocked Congress unable to pass legislation to protect its own citizens from the harmful effects of AI, within a system further constrained by a more legally limited regulatory capacity, is a major problem. Though the U.S. houses essentially all the leading corporations developing AI, its lack of regulation threatens allowing them to run rampant.

On the other hand, if Europe produces no flagship tech companies of its own whose development of AI systems it can direct towards ethical and responsible ends, it makes itself highly susceptible to coercion by the very tech companies it is attempting to govern. If it cannot prove that responsible guardrails are compatible with high-speed innovation, it risks costly backlash to its entire enforcement regime. And in light of widespread speculation about Europe's irrelevance, the EU must ensure that its approach to AI is not contributing to its lagging behind the U.S. and China in economic and military power.

The EU and U.S. are operating in a world where AI threatens to disrupt entire sectors and government functions through widespread automation, a growing digital divide, national security threats, disinformation, and polarization and democratic breakdown. Authoritarian powers like China are attempting to export a model of "digital authoritarianism" marked by censorship, mass surveillance, and state control of data<sup>66</sup>. The strategies pursued by democracies like the EU and U.S. and their level of cooperation will determine whether their citizens are safe from these threats.

<sup>66</sup> Polyakova, A Summit for Democracy

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<sup>&</sup>lt;sup>65</sup> As Clark and Hadfield (2019) point out, this approach certainly worked out poorly for credit agencies (resulting in the 2008 financial crisis) and the airline industry (resulting in multiple Boeing 737 crashes).

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