

# Funcas Intelligence

GEOPOLITICAL UNCERTAINTY AND MARKET TENSIONS: INTEREST RATE  
DIVERGENCE, SHIFTING CAPITAL FLOWS, SAVINGS AND INVESTMENTS IN EUROPE,  
CLIMATE POLICY REVERSALS, AND THE NEW AI PARADIGM

March 2025

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*Funcas Intelligence (FI)* is a publication directed towards a broad base of international and Spanish readers. Funcas Intelligence's focus is to identify and assess the game changers and relevant events of the global economy and the financial sector with potential impact for Spain.

*FI* is produced by the staff of Funcas under the direction and supervision of Managing Editors Ms. Alice Faibishenko and Mr. Juan Núñez-Gallego. We would like to especially thank Santiago Carbó Valverde for providing the views expressed in the article titled, *Markets on edge: Geopolitics, trade war and AI disruption*.

The opinions, judgements, and forecasts contained in *FI* do not necessarily represent those of the Board of Trustees of Funcas, nor those of the Spanish Confederation of Savings Banks (CECA).

# Letter from the Editors

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As 2025 progresses, the international landscape is becoming increasingly complex. The divergence in monetary policies, geopolitical tensions, and technological disruptions are keeping markets on edge, and all indications suggest that this will remain the case in the coming months.

In the March issue of *Funcas Intelligence*, we analyze how the growing gap between the Federal Reserve and the ECB is reshaping investment strategies, attracting capital to the U.S., and leaving Europe facing a significant competitiveness challenge. One of the EU's responses is to push forward with its Savings and Investments Union (SIU), though it faces considerable obstacles.

On the climate front, potential policy shifts in the U.S. and changing strategic priorities in the EU are casting doubts on global commitments to the energy transition. Meanwhile, the emergence of China's AI technology through DeepSeek is challenging Silicon Valley's technological dominance and reigniting the debate over Europe's digital future.

A world undergoing rapid and profound changes demands strategic decisions. Here, we explore some of the key factors shaping this new landscape.

# Contents

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## Markets on edge

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The ECB's latest rate cut, geopolitical shocks, trade tensions, and technological shifts are adding new layers of complexity to an already uncertain global economic landscape. Financial markets are reacting to heightened uncertainty, with sectors like defense, technology, and manufacturing experiencing significant shifts as investors reassess risks and opportunities.

## The shift in global investments

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Higher US interest rates are playing a role in attracting capital flows to the US vis-à-vis the EU in the short-term; however, the US's strong innovation ecosystem and Europe's structural productivity challenges are set to reinforce this trend in the long-term. To remain competitive in the global financial system, Europe needs to boost productivity and innovation by undertaking reforms, completing the capital markets union, and increasing investment; however, under current fiscal constraints and an unstable geopolitical context, these measures may prove difficult to achieve.

## The EU's Savings and Investments Union (SIU)

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Europe is sitting on a significant stock of savings, yet many of its businesses struggle to access funding. The purpose of the Savings and Investments Union (SIU) is to change that, by unlocking regulatory barriers and building common institutions – a challenging undertaking.

## Trump's climate agenda

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Trump's climate policies will likely slow the green transition in the U.S. although the ultimate impact will also depend on the future of the Inflation Reduction Act; in any event, their ripple effects in Europe are more complex, with the EU's own economic performance and shifting policy priorities towards defense playing an outsized role. Despite pro-climate rhetoric, both the U.S. and the EU are retreating from key green policies—Trump explicitly, and the EU under the guise of “simplification” —leaving the future of global climate policy uncertain.

## Deconstructing DeepSeek's AI disruption

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DeepSeek's launch of its open-source AI-powered chatbot app will lead to a future in which AI is more accessible and less monopolistic while reducing negative environmental impact. Its impressive results reveal that advanced research can lead to the discovery of new, more efficient, and sustainable AI models and underscore that EU plans to create large European AI champions with public money were misguided.

# Markets on edge

## Geopolitics, trade war and AI disruption

- The ECB's latest rate cut, geopolitical shocks, trade tensions, and technological shifts are adding new layers of complexity to an already uncertain global economic landscape.
- Financial markets are reacting to heightened uncertainty, with sectors like defense, technology, and manufacturing experiencing significant shifts as investors reassess risks and opportunities.

The ECB's latest rate cut in March 2025 has widened the divergence with the U.S. Federal Reserve's monetary strategy, adding new complexities to global markets

Financial markets in 2025 are navigating a complex landscape shaped by geopolitical tensions and rapid technological advancements. Events range from sharp geopolitical disruptions to paradigmatic specific events in the AI industry. Key episodes, such as the recent Oval Office confrontation between U.S. President Donald Trump and Ukrainian President Volodymyr Zelenskyy, the emergence of China's DeepSeek in the artificial intelligence (AI) sector, and escalating tariffs, and possibly trade wars, are exerting significant influence on global economic dynamics. The recent decision by the ECB on 6 March 2025, which again lowered interest rates 25bp, widened the divergence with the U.S. Federal Reserve's monetary strategy. The future of interest rates globally will likely be affected by the potential impact on inflation and economic growth prospects.

The latest news comes from the European reaction to geopolitical events, particularly, the end of U.S. financial aid to Ukraine. The plan to substantially increase defense spending across the EU and Britain has had a considerable impact on financial markets' performance. European stock markets witnessed increases in share prices while the cost of borrowing for governments significantly increased. The highlights include Germany's expansionary fiscal plans for both defense and economic infrastructure. The latter entails a €500 billion infrastructure fund for transportation, energy grids and housing.

### Geopolitical tensions: The U.S.-Ukraine rift

The halt in U.S. aid to Ukraine not only strains U.S.-Ukraine relations but also raises concerns about the stability of Eastern Europe, prompting investors to reassess risks associated with the region

In late February 2025, a heated exchange occurred in the Oval Office between President Trump and President Zelenskyy. The confrontation arose over differing approaches to the ongoing conflict in Ukraine, with Trump accusing Zelenskyy of prolonging the war and gambling with global security. This meeting concluded abruptly, leading to a suspension of U.S. military aid to Ukraine. The halt in aid not only strains U.S.-Ukraine relations but also raises concerns about the stability of Eastern Europe, prompting investors to reassess risks associated with the region.

### Trade wars and tariff turbulence

The U.S. administration's decision to impose steep tariffs on imports from Canada and Mexico has escalated trade tensions, with both nations considering retaliatory measures. These actions disrupt established supply chains and introduce inflationary pressures, affecting industries reliant on cross-border trade. Uncertainty stemming from potential trade wars contributes to market volatility, as businesses and investors grapple with the implications of rising protectionism for global economic growth.

The U.S. administration's steep tariffs on imports from Canada and Mexico are fueling trade tensions, disrupting supply chains, and introducing inflationary pressures

### Technological disruptions: DeepSeek's entry into AI

In January, China's DeepSeek made a groundbreaking entry into the AI industry by developing cost-effective, high-performance AI models. Utilizing innovative techniques, DeepSeek significantly reduced the resources required for AI development, challenging established players like OpenAI and Google. This democratization of AI technology is expected to lower barriers to entry for smaller firms, intensifying competition and potentially leading to reduced profit margins for incumbent tech giants. Investors are closely monitoring these developments, as they may lead to a revaluation of technology stocks and shifts in market leadership within the sector.

China's DeepSeek has upended the AI sector by developing cost-effective, high-performance models, intensifying competition and reshaping market dynamics within the sector

### Economic and financial market implications

The convergence of these geopolitical and technological events is creating a volatile environment for financial markets. Investors are exhibiting heightened sensitivity to news related to geopolitical conflicts and technological disruptions, leading to increased market fluctuations. Sectors directly impacted by these developments, such as defense, technology, and manufacturing, are experiencing notable shifts in valuations. The suspension of military aid to Ukraine has led to a reevaluation of defense stocks, while DeepSeek's AI advancements are prompting a reassessment of technology companies' competitive positions. Additionally, industries exposed to international trade are facing uncertainties due to escalating tariff disputes.

Sectors directly impacted by recent developments, such as defense, technology, and manufacturing, are experiencing notable shifts in valuations

### Outlook for the coming months

Looking ahead, financial markets are expected to remain sensitive to geopolitical developments and technological innovations. The trajectory of U.S.-Ukraine relations and the potential for further escalation or resolution will significantly influence investor sentiment. Trade policies and the possibility of new tariffs or trade agreements will continue to be critical factors shaping global economic prospects, potentially impacting inflation and growth perspectives. These evolving dynamics make navigating the uncertainties of 2025 more challenging.



# The shift in global investment

## Assessing increased capital flows to the US

- Higher US interest rates are playing a role in attracting capital flows to the US vis-à-vis the EU in the short-term; however, the US's strong innovation ecosystem and Europe's structural productivity challenges are set to reinforce this trend in the long-term.
- To remain competitive in the global financial system, Europe needs to boost productivity and innovation by undertaking reforms, completing the capital markets union, and increasing investment; however, under current fiscal constraints and an unstable geopolitical context, these measures may prove difficult to achieve.

While the US's share of global GDP is about twice the size of the euro area's, it has attracted three times as much in capital inflows since late 2019

### The shifting investment landscape

With investors pursuing opportunities for long-term growth and higher returns, capital allocations are increasingly gravitating to the US over Europe, compounded by the pull of higher US interest rates. However, over a longer horizon, US outperformance in attracting capital is largely based on the US's higher potential growth and better productivity record. Sovereign wealth funds, institutional investors, and corporations have taken note, and have adjusted their portfolios accordingly. Indeed, while the US's share of global GDP is about twice the size of the euro area's, it has attracted three times as much in capital inflows since late 2019.<sup>1</sup>

That said, there has been an uptick in interest in European stock markets in the first few months of 2025, which has supported stronger European equity asset performance as investors have become increasingly concerned with US policy uncertainty, possible stagflation, and elevated US valuations.<sup>2</sup>

### Monetary policy divergence is a key near-term factor

US interest rates have exceeded euro area interest rates by a notable margin since 2022

US interest rates have exceeded euro area interest rates by a notable margin since 2022. Much of this divergence can be explained by the higher peak in the US monetary policy response following the pandemic-era inflationary surge and more persistent core inflation. Since late 2024, the Federal Reserve has pursued a cautious approach to easing, with markets expecting ongoing inflationary pressures against a backdrop of possible tariffs. While the US – euro zone interest rate differential has lessened since its peak, in recent months it has widened.

### Structural productivity trends over the long-term

Structural productivity trends are driving capital allocations over the long-term with the US's productivity advantage over Europe predating the pandemic. Accordingly, from 2019 to 2024 the US's advantage was reinforced as labour productivity per person grew almost 9 percent in the United States but stagnated in the euro area.<sup>3</sup>

The US's greater capacity to fashion and harness leading technologies (*e.g.*, artificial intelligence, semiconductors, digital services, biotech, *etc.*) to boost business innovation is one of the principal drivers of US productivity outperformance.<sup>4</sup> For example, in the 25 years to 2019, the US's IT sector contributed around 20 percent to total hourly labour productivity growth compared to just 12 percent in the euro area.<sup>5</sup>

Deeper and more diversified US capital markets also facilitate better risk sharing, especially through greater access to equity financing.<sup>6</sup> As a result smaller US firms enjoy easier access to capital, and can scale up more rapidly, driving more intense competition and innovation.<sup>7</sup> While European firms tend to rely more on debt, especially bank financing, the higher degree of equity funding in the US diversifies risk in a manner that allows firms to take on riskier ventures with higher expected payoffs.<sup>8</sup>

Europe's rigid labor markets have contributed to a weaker productivity record. For example, in Europe it tends to be more difficult to hire, fire, and allocate hours.<sup>9</sup> In the US such rigidities are lower, facilitating less costly and more rapid reallocation of workers into growing and more productive sectors.<sup>10</sup> Furthermore, Europe's older and slower growing labor force is associated with fewer new or younger firms, less innovation and adoption of new technology, and lower productivity gains.<sup>11</sup>

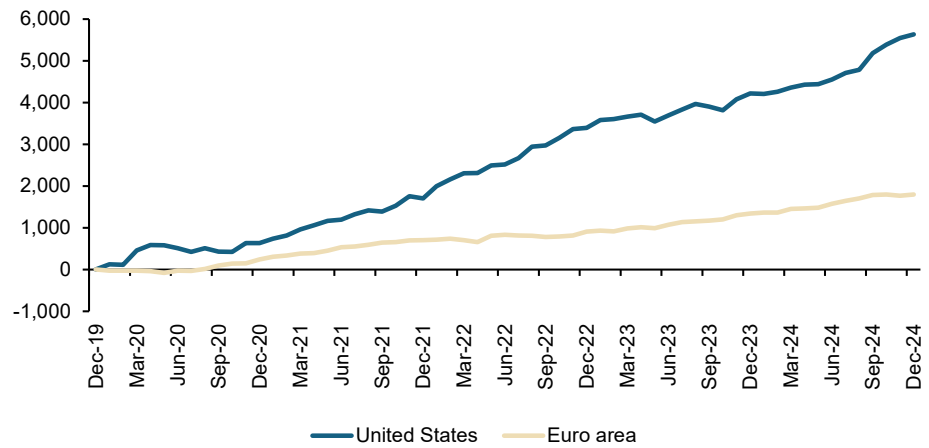
Completing the capital markets union is crucial for accelerating financial integration, increasing depth, and better facilitating cross-border capital flows. Doing so will also improve the attractiveness of the continent's assets for long-term investment, tapping into investor desire for diversification.

By addressing productivity gaps and simplifying regulations, Europe has the chance to remain competitive in the global financial system. With rising protectionism and an increasingly unfriendly external environment Europe must address its long-standing productivity challenges by committing to reform, completing the capital markets union, and investing in innovation. While critical next steps, the currently divisive political climate, together with fiscal constraints, will make taking already difficult measures even more challenging and at the same time more necessary.

A vibrant innovation ecosystem with strong performance in emerging technologies, deeper capital markets, and a younger, more dynamic labour market have historically underpinned the US's advantage

By addressing productivity gaps and simplifying regulations, Europe has the chance to remain competitive in the global financial system

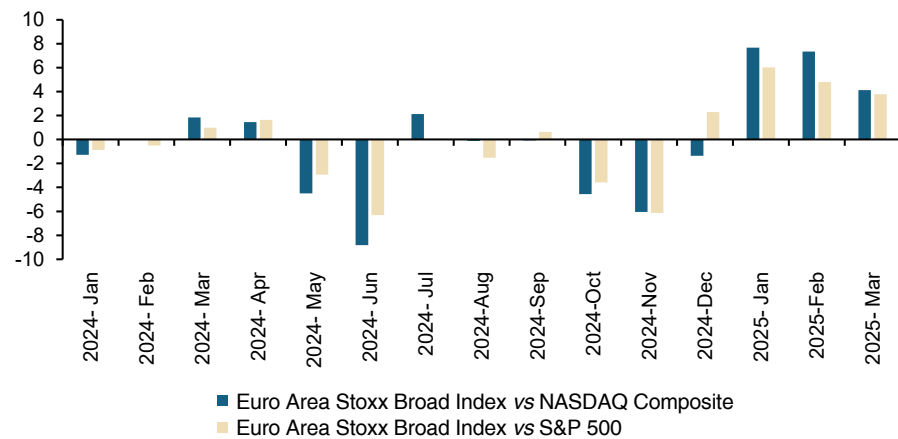
### EXHIBIT 1.0 – CAPITAL FLOWS: UNITED STATES AND EURO AREA (\$US, BILLIONS)



Note: Exhibit shows the accumulated stock of United States Net Treasury International Capital Flows (\$US, Billion) and of Euro Area Capital Flows (converted to \$US, Billions using average monthly exchange rates) since December 2019.

Sources: Investing.com via the U.S. Department of the Treasury; Trading Economics via the European Central Bank; and European Central Bank.

### EXHIBIT 2.0 – OUTPERFORMANCE OF EURO AREA EQUITY INDICES OVER MAJOR US INDICES IN 2025



Note: Exhibit shows the month over month growth differential between the Euro area STOXX Broad index and the US NASDAQ Composite and US S&P 500.

Sources: WSJ, STOXX, Yahoo Finance.

## Notes

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- <sup>1</sup> GDP is measured in current, billions of U.S. dollars, using IMF estimates for 2025.
- <sup>2</sup> <https://www.cnbc.com/2025/02/19/europe-stocks-are-outperforming-the-us-this-year.html>
- <sup>3</sup> [https://www.ecb.europa.eu/press/economic-bulletin/focus/2024/html/ecb.ebbox202406\\_01~9c8418b554.en.html#:~:text=In%20the%20same%20period%20the,-%20or%200.8%25%20a%20year.](https://www.ecb.europa.eu/press/economic-bulletin/focus/2024/html/ecb.ebbox202406_01~9c8418b554.en.html#:~:text=In%20the%20same%20period%20the,-%20or%200.8%25%20a%20year.)
- <sup>4</sup> <https://www.aeaweb.org/articles?id=10.1257/jep.22.1.25>; <https://www.hoover.org/research/romer-or-ricardo>
- <sup>5</sup> [https://www.ecb.europa.eu/press/economic-bulletin/focus/2024/html/ecb.ebbox202406\\_01~9c8418b554.en.html#:~:text=Published%20as%20part%20of%20the,6.7%25%20in%20the%20United%20States.](https://www.ecb.europa.eu/press/economic-bulletin/focus/2024/html/ecb.ebbox202406_01~9c8418b554.en.html#:~:text=Published%20as%20part%20of%20the,6.7%25%20in%20the%20United%20States.)
- <sup>6</sup> De Fiore and Uhlig (2011) and Di Vito *et al.* (2023) (PDF 557.19KB) (*ECB Occasional Paper Series*).
- <sup>7</sup> <https://www.centralbank.ie/news/article/speech-productivity-is-almost-everything-the-drivers-and-implications-of-productivity-differences-between-the-us-and-eu-remarks-by-governor-gabriel-makhlouf-at-the-global-interdependence-center-philadelphia-17-jun-2024>
- <sup>8</sup> De Fiore and Uhlig (2011) and Di Vito *et al.* (2023) (PDF 557.19KB) (*ECB Occasional Paper Series*); <https://www.centralbank.ie/news/article/speech-productivity-is-almost-everything-the-drivers-and-implications-of-productivity-differences-between-the-us-and-eu-remarks-by-governor-gabriel-makhlouf-at-the-global-interdependence-center-philadelphia-17-jun-2024>
- <sup>9</sup> [https://www.nber.org/system/files/working\\_papers/w13365/w13365.pdf](https://www.nber.org/system/files/working_papers/w13365/w13365.pdf)
- <sup>10</sup> <https://www.tandfonline.com/doi/full/10.1080/13600818.2023.2276702>
- <sup>11</sup> <https://cepr.org/voxeu/columns/demographics-and-technology-explain-secular-stagnation-and-more>; <https://www.stlouisfed.org/on-the-economy/2024/nov/link-between-falling-population-productivity>

# The EU's Savings and Investments Union (SIU)

## A chance to unlock capital for European growth

- Europe is sitting on a significant stock of savings, yet many of its businesses struggle to access funding.
- The purpose of the Savings and Investments Union (SIU) is to change that, by unlocking regulatory barriers and building common institutions – a challenging undertaking.

### Financial fragmentation

One of the root causes of the mismatch between savings and productive investment is EU fragmentation, at both the market, regulatory and supervisory level. Retail and institutional investment in the EU remains constrained by regulatory fragmentation and nationalism. For instance, pension funds and insurance markets, a potential source of capital, remain largely country-based, with limited options and cross-border investment.

EU capital markets lack the necessary scale and depth to provide sufficient investment opportunities, particularly in the area of risk capital

Due to these barriers on both the retail and institutional sides, many companies—especially young and innovative firms—struggle to secure adequate financing. Bank financing alone is not always suitable, particularly for early-stage and high-growth companies that require equity rather than debt to support their expansion. EU capital markets lack the necessary scale and depth to provide sufficient investment opportunities, particularly in the area of risk capital.

As a result, many businesses in the EU face funding shortfalls. Indeed, conditions for larger firms are much better both in terms of price and liquidity in the US or the UK. This highlights the urgent need to strengthen and expand EU capital markets to better support innovative companies and drive long-term economic growth.

### Previous attempts to address fragmentation have fallen short

Previous attempts to address market fragmentation, such as the Capital Markets Union (CMU) and the Banking Union (BU) have largely been unsuccessful. It is important to draw lessons from earlier efforts to unify capital and financial markets. The Lamfalussy approach, introduced in the early 2000s, aimed to streamline EU financial regulation and promote coordination. However, it relied too heavily on self-regulation by banks, leading to distortions in market competition as some national regulators adopted looser oversight. This lack of uniform supervision contributed to systemic risks that became evident during

the 2008 financial crisis. In response, the De Larosi re approach established European Supervisory Authorities (ESAs)—the EBA, ESMA, and EIOPA—to strengthen EU-wide oversight. While these institutions improved regulatory consistency, national competent authorities (NCAs) remained in place, limiting the full integration of financial markets and leaving supervisory practices uneven across member states.<sup>1</sup>

### **Enter the SIU**

In this regard, the Commission is attempting to move forward on its latest initiative, the Savings and Investments Union, or SIU. The SIU aims to channel EU savings into productive investments, aligning with the EU's strategic priorities of innovation, the green and digital transition, and defence and represents the Commission's latest attempt to create a common financial market. This initiative fits within the Commission's broader agenda of reducing red tape and simplifying regulations to make financial markets more accessible and efficient. The Commission launched a Call for Evidence in early February of this year to collect input on its overall approach to the SIU and to identify significant challenges that the SIU should address. Indeed, in the coming weeks, we expect a communication to be published with further details over the proposal. Planned adoption is scheduled for the second quarter of 2025.

The SIU aims to channel EU savings into productive investments, aligning with the EU's strategic priorities of innovation, the green and digital transition, and defence and represents the Commission's latest attempt to create a common financial market

The potential advantages of deeper financial market development and integration are significant. Better-integrated capital markets could unlock billions in new financing for EU companies, particularly benefiting young and innovative firms.

Residents would also gain from enhanced market access, with more opportunities to save and invest efficiently, secure better returns, and build long-term wealth—including for retirement.

### **How the SIU plans to address market fragmentation**

Although there are as yet not too many concrete details over the Commission's SIU proposal, according to the Commission, the SIU seeks to achieve its objectives by enhancing the mobilization of savings through the promotion of simple, low-cost investment products and incentives, which will help pool capital for greater wealth creation. It also aims to expand investment opportunities for EU firms, especially young and innovative companies, by encouraging both private and institutional investors to support productive businesses. To foster greater market integration and efficiency, the proposal calls for the removal of barriers to cross-border activity, including those related to supervision, taxation, and authorization. Finally, the Commission aims to strengthen supervisory frameworks to ensure the consistent application of the single rulebook, ensuring high-quality market oversight throughout the EU.

The Commission aims to balance legislative and non-legislative actions while minimizing burdens on the financial sector, particularly in a lower-rate environment. Reducing regulation could limit frictions and foster integration. In shaping the SIU, it will also be important for the Commission to focus on feasible initial steps, like establishing a single supervisory body, and address

the long-term need for harmonizing regulations across the EU.<sup>2</sup> In this regard, the proposal for a “28<sup>th</sup> regime”, which would create a unified regulatory framework for financial activities across EU member states, aiming to enhance the mobility of savings and capital,<sup>3</sup> warrants consideration.

### **An uncertain outlook for the SIU**

The SIU presents a unique opportunity for Europe to mobilize capital more effectively, but success depends on learning from past attempts. Excessive regulation could stifle competitiveness. As well, there are practical considerations – member countries may consider that existing national rules, though inhibiting cross-border capital flows, provides a high degree of predictability to their financial system and solvency procedures. There is also resistance from industry itself – European markets mean more competition. Finally, the objective of the SIU is not to achieve a European financial market similar to the American one because it is practically impossible. The goal is to improve the efficiency in how capital is allocated throughout the EU. For instance, the SIU does not seem to tackle the main issues presented by the previous plans for the CMU and the BU. As well, the initial perception is that there are a lack of policies focused on the demand side.

In sum, the SIU represents a necessary step toward financial integration, which requires drawing lessons from past failures and overcoming rising economic nationalism.

## Notes

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<sup>1</sup> The Lamfalussy approach (2001) emerged in response to financial market integration needs in the early 2000s but was weakened by excessive reliance on self-regulation, while the De Larosière approach (2009) was a reaction to the 2008 financial crisis, leading to stronger EU-wide supervisory authorities while maintaining national regulatory roles.

<sup>2</sup> <https://www.bruegel.org/first-glance/european-capital-markets-union-make-it-or-break-it>

<sup>3</sup> <https://eur-lex.europa.eu/legal-content/EN/TXT/HTML/?uri=CELEX%3A52010IE0758>



# Trump's climate agenda

## Assessing the ultimate impact for the U.S. and EU

- Trump's climate policies will likely slow the green transition in the U.S. although the ultimate impact will also depend on the future of the Inflation Reduction Act; in any event, their ripple effects in Europe are more complex, with the EU's own economic performance and shifting policy priorities towards defense playing an outsized role.
- Despite pro-climate rhetoric, both the U.S. and the EU are retreating from key green policies—Trump explicitly, and the EU under the guise of “simplification” —leaving the future of global climate policy uncertain.

### Trump's climate agenda

President Trump's climate policies prioritize fossil fuel production while dismantling clean energy initiatives. He plans to expand oil and gas drilling on federal lands, expedite permits for fossil fuel infrastructure, and eliminate incentives for renewable energy and electric vehicles (EVs). Many of these policies will require Congressional backing, lengthy regulatory processes, or legal battles to succeed. While he may not achieve all his objectives (at least not quickly) and the fate of the IRA will play a critical part, his agenda will still have political, environmental, and economic impact.

### Impact on the United States

*Oil and gas:* Trump has the authority to open more federal lands for drilling and reduce paperwork, so these changes should be quick. The government has already paved the way for fast-track approvals of fossil fuel permits.<sup>1</sup> His agenda will likely lead to increased oil and gas exports as he pressures other countries to boost imports or face retaliatory actions. The lower extraction costs could lead to gains for oil companies drilling in new federal areas. Trump will also insist companies drill more. This will increase supply, outpace demand, and reduce oil prices up to a point, though other factors will also affect prices and dictate these decisions.<sup>2</sup> Some companies that shifted their portfolios to reduce carbon emissions and curb climate change have switched their focus back to oil and gas.<sup>3</sup>

Trump has the authority to eliminate permitting for wind power on federal lands so that these changes can happen immediately, but eliminating renewable energy tax credits will be difficult to achieve given the bipartisan congressional support

*Renewables:* Trump has the authority to eliminate permitting for wind power on federal lands so that these changes can happen immediately, but eliminating renewable energy tax credits will be difficult to achieve given the bipartisan congressional support. Trump's efforts could end up reducing investment in the sector and dampening growth, but they will probably not kill it given the strong market demands. The U.S. Energy Information Agency expects renewable energy sources will contribute 27 percent of electricity generation in 2026, a two percent increase from 2025.<sup>4</sup> Individual states as well as the private sector

may fill the gap even if the United States rolls back green policies and subsidies. Some financial institutions continue pushing climate initiatives, seeing them as long-term economic priorities, however, as regulatory pressure weakens or disappears, many banks will likely deprioritize green projects.

*EVs:* Trump wants to remove EV manufacturing, adoption, and charging incentives included in the Inflation Reduction Act (IRA). He will need Congressional backing to do so, but he may face pushback from fellow Republicans since 80 percent of IRA investments are in conservative states and districts.<sup>5</sup> His plans to eliminate federal pollution limits on cars will move as quickly as the U.S. regulatory process allows. It took him at least 18 months to undo them in his first administration. Democratic-led states comprise half of the U.S. auto market and will press forward with their plans to ban gas-powered cars.<sup>6</sup> Trump will likely undermine EV production and sales, but U.S. automakers still favor EVs due to regulatory pressure, subsidies, and consumer demand. However, while EV adoption has grown, consumer demand—especially in the U.S. and Europe—is slowing due to high costs, charging concerns, and subsidy rollbacks, making the impact of Trump’s policies more likely to reduce EV adoption. Elon Musk, the owner of Tesla, the largest EV manufacturer in the United States, has become one of Trump’s closest allies. While he has not attempted to dissuade Trump from his anti-EV stance—believing that the policies would harm his competitors more than Tesla, particularly in China and the EU—Tesla itself is now facing a sharp decline in sales, raising questions about the company’s resilience in an increasingly challenging market. In this regard, tariffs may have a significant environmental effect on the car sector.

### **Impact on the EU**

The EU, facing slow economic growth and shifting policy priorities, including towards defense, is reconsidering its climate approach. Although this paradigm shift had begun with changes in the European Parliament following the recent elections, it may gain some momentum as a result of Trump’s climate policies.<sup>7</sup> More EU member states and political parties have been resisting the implementation of pro-climate regulations in the last few months.<sup>8</sup> While some EU states resist stringent regulations, the European Commission insists it remains committed to the Green Deal, but its actions tell a different story.<sup>9</sup> Under the guise of “simplification,” the EU is quietly relaxing key climate regulations, partly in response to economic pressures and competition from the U.S. and China. This inconsistency mirrors broader political trends—like Trump’s climate stance—where rhetoric and policy do not always align, and the final outcome will likely be less green transition.

The EU, facing slow economic growth and shifting policy priorities, including towards defense, is reconsidering its climate approach

*Oil and gas:* The EU will likely import more oil and lower-priced liquefied natural gas (LNG) from the United States but less from elsewhere. This could help further reduce the EU’s reliance on Russian gas. It could lead to greater European energy security.

*Renewables:* If the United States moves away from renewables, it would likely lead to higher greenhouse gas emissions than previously expected mostly

driven by the change to gas (currently the U.S. represents 12% of global emissions), undermining global climate goals. This shift could also have mixed consequences for the EU. On one hand, a weakened U.S. renewables sector might give European industries—such as wind, solar, and alternative fuels—some increased competitive edge over China. On the other, escalating trade tensions and potential EU tariffs in response to U.S. policies could create uncertainty, limiting the extent to which Europe benefits from these changes.

*EVs:* The European Commission is quietly retreating from some of its green commitments, extending compliance periods for emissions rules and expediting a review of the 2035 internal combustion engine ban. Some automakers are shifting strategies towards plug-in hybrids instead of fully electric vehicles, reflecting concerns about both consumer demand and competition from cheaper Chinese EVs. While this adjustment may help European automakers in the short-term, it also signals political concern over the fate of the auto industry, in particular in Germany, which seems increasingly “too big to fail.” Meanwhile, Trump’s tariffs and the EU’s own regulatory uncertainty add further pressure, raising questions about Europe’s long-term competitiveness in the EV market. As well, Trump’s rollback efforts of EV incentives could reduce U.S. demand for European cars, like Volkswagen and BMW, which have invested heavily in EVs. European manufacturers could also shift their investments to Europe or Asia and focus their sales on countries like China, which have more friendly EV policies. But, at the same time, Chinese producers will become more aggressive in non U.S. markets, which is bad for the EU electric car industry. In any case, Trump’s climate policy is just one factor, probably not the largest, in the EU rethink of climate policy. Other factors are poor economic prospects, tariffs and, of course, defense spending.

### **Conclusion**

As stated, Trump’s climate policies could translate to a slower green transition in the U.S., or even a move backwards, to a large degree depending on the ultimate fate of the IRA. They may take time to implement and encounter roadblocks, but they will be relevant environmentally and politically. China, the EU, and the UK will likely attempt to fill the political void as the United States retreats from its global leadership role. That said, despite pro-climate rhetoric, there is pressure within the EU to relax or dilute green goals, also due to external factors such as recession and the need to increase defense spending, among others. Thus, some further relaxation will almost certainly occur.

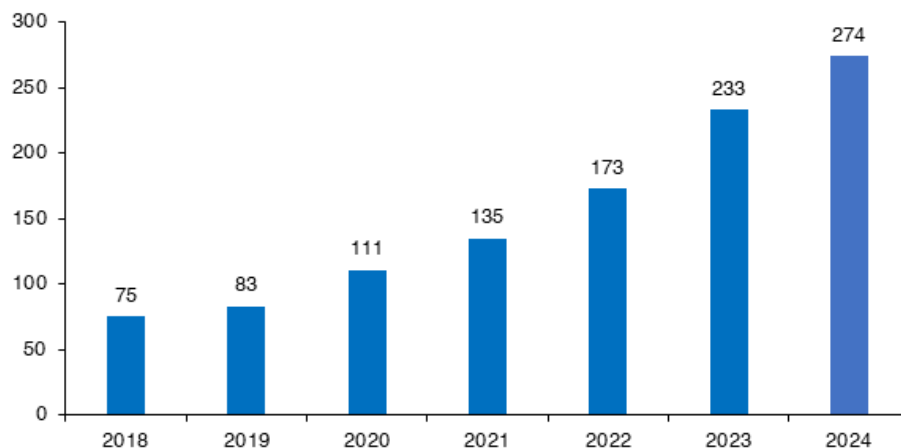
Trump's policies will undermine the global commitments to transition away from fossil fuels, slow the growth of renewables, and increase greenhouse gas emissions. The impact on oil prices is set to be moderate.

On the other hand, the economic impact will be mixed. His policies will result in fewer green jobs, but more so-called brown jobs, such as fossil fuel extraction. Reducing regulations will promote business expansion and investment in the short-term. Depending on what happens with the IRA, eliminating subsidies

that promote green energy will reduce federal spending; however, over the longer-term, clean energy investors will look for other markets with greater state support, although with the U.S. and EU retreating, this may be increasingly hard to find.

The EU cannot simultaneously maintain its Green Deal commitments while systematically rolling back climate regulations—it is ultimately a choice between one or the other. The Commission’s framing of this shift towards relaxation of standards as “simplification” masks a broader retreat from ambitious targets under pressure from economic and political realities. Loosening mandates and removing penalties for non-compliance signals that climate policies are now negotiable, which could further dilute the EU’s commitment to climate action.

EXHIBIT 3.0 – CLEAN ENERGY INVESTMENT IN THE UNITED STATES  
(BILLION USD)



Source: Rhodium Group/MIT-CEEPR Clean Investment Monitor, <https://rhg.com/research/clean-investment-monitor-q4-2024-update/>

## Notes

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- <sup>1</sup> <https://www.nytimes.com/2025/02/19/climate/army-corps-engineers-fossil-fuel-permits.html?smid=nytcore-android-share>
- <sup>2</sup> <https://www.eia.gov/pressroom/releases/press564.php>
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- <sup>4</sup> <https://www.eia.gov/pressroom/releases/press564.php>
- <sup>5</sup> <https://www.nytimes.com/2025/02/10/climate/trump-clean-energy-republican-states.htm>
- <sup>6</sup> [https://www.nytimes.com/2025/02/26/climate/republicans-california-waiver-electric-cars.html?campaign\\_id=54&emc=edit\\_clim\\_20250227&instance\\_id=148626&nl=climate-forward&regi\\_id=34652644&segment\\_id=192099&user\\_id=2d456375d416115d8ff5090cfa7bafab](https://www.nytimes.com/2025/02/26/climate/republicans-california-waiver-electric-cars.html?campaign_id=54&emc=edit_clim_20250227&instance_id=148626&nl=climate-forward&regi_id=34652644&segment_id=192099&user_id=2d456375d416115d8ff5090cfa7bafab)
- <sup>7</sup> *Ibid.*
- <sup>8</sup> [https://www.elconfidencial.com/mundo/2025-02-08/bruselas-contrarrevolucion-simplificacion-amenaza\\_4059797/](https://www.elconfidencial.com/mundo/2025-02-08/bruselas-contrarrevolucion-simplificacion-amenaza_4059797/)
- <sup>9</sup> <https://www.ft.com/content/53f3886b-b90b-41e5-81a7-2432977c9bca?emailId=894e984e-ad54-4a2d-abaf-493c85ab8cf5&segmentId=22011ee7-896a-8c4c-22a0-7603348b7f22>

# Deconstructing DeepSeek's AI disruption

## Lessons for the EU

- DeepSeek's launch of its open-source AI-powered chatbot app will lead to a future in which AI is more accessible and less monopolistic while reducing negative environmental impact.
- Its impressive results reveal that advanced research can lead to the discovery of new, more efficient, and sustainable AI models and underscore that EU plans to create large European AI champions with public money were misguided.

### Introduction

DeepSeek's launch of V3, an open-source AI-powered chatbot app, on 10 January rocked the global technology industry. The Chinese start-up produced a more cost-effective and more sustainable model using less advanced chips that matched the performance of others on the market. It also open-sourced its system, allowing public study and use.

The unveiling of DeepSeek's V3 model shattered the notion that only well-resourced tech companies like Microsoft, Google, and Meta could afford to build advanced AI. DeepSeek V3 reportedly costs \$5.6 million to train, while ChatGPT-4 exceeded \$100 million.<sup>1</sup> Unlike competitors, who used 16,000 chips to train their chatbots with supercomputers,<sup>2</sup> DeepSeek used 2,000 Nvidia H800, a less advanced chip,<sup>3</sup> stockpiled before U.S. government export controls to China tightened in October 2023.<sup>4</sup>

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OpenAI has accused DeepSeek of distilling its GPT-4 knowledge and violating its Terms of Service and property rights. DeepSeek contends that distillation is common, and OpenAI has not provided evidence of intellectual property theft. The case represents the growing challenge of balancing AI innovation, intellectual property rights, and ethics as these accusations will likely be difficult to prove in court.

DeepSeek's nearly \$6 million in training costs refers only to what it spent to train the final AI version and does not include the complete cycle costs. While there is no evidence to dispute the company's cost claims, DeepSeek likely reported its costs narrowly to boost its claims as the "most economical."<sup>5</sup> DeepSeek claims it utilized several strategies to reduce computation time and

memory storage. It relied on generalists to coordinate expert interactions, used data aggregates instead of raw data, and optimized decimal calculations.<sup>6</sup>

The start-up also demonstrated that high-quality AI can be created with a reduced carbon footprint. Many tech companies do not disclose their carbon footprints due to their high levels, yet DeepSeek reduced its environmental impact by decreasing the computational costs of training and running models.

DeepSeek publicized enough information to enable others to run and adapt its model but not enough to recreate it. The new paradigm allows competitors to build cutting-edge AI models with less money and computing power. It could lead to a day when AI technology is considered a commodity, with companies selling essentially the same product. Proprietary software technology has faced challenges from Chinese technology. This implies it will be more difficult to monetize AI, but it will be easier to develop applications.

### **Markets react, but no AI crash**

Tech stocks fell 5.8 percent on 27 January following DeepSeek's announcement,<sup>7</sup> with Nvidia losing 17 percent and ASML dropping 6 percent.<sup>8</sup> However, the market quickly rebounded the next day, leading to a partial recovery and indicating investor caution about AI-related stock valuations but sustained demand for more advanced chips.

DeepSeek's breakthrough poses a more significant challenge for AI service providers like OpenAI, which, albeit not publicly traded, likely suffered more substantial losses. The announcement also triggered a sell-off of electricity companies near data center hubs, signaling expectations of a shift to more decentralized AI infrastructure.<sup>9</sup>

Rather than bursting an AI bubble, DeepSeek's entry led to a market correction that may help stabilize future growth

Fears of an AI-driven stock bubble persist, and the late-1990s dot-com crash is often compared to it. However, some sources say that current valuations are based on solid earnings, not speculation.<sup>10</sup> Rather than bursting an AI bubble, DeepSeek's entry led to a market correction that may help stabilize future growth. Nevertheless, more time is needed to see what will ultimately happen.

DeepSeek's breakthrough may not yet immediately threaten advanced chipmakers like Nvidia. As AI development becomes faster and cheaper, adoption will expand, boosting demand for high-performance chips. Nvidia's proprietary coding language, Cuda, remains the industry standard, and even leaner AI models still rely on its most powerful chips.<sup>11</sup> Some Chinese tech giants have significantly increased their orders of Nvidia's H20 chip, which is designed for China under U.S. export controls, since DeepSeek's launch.<sup>12</sup> Indeed, Nvidia's profits and revenues soared last quarter due to strong AI chip demand, with sales up 78% to \$39.3 billion and net income rising 80% to \$22.1 billion, despite concerns over competition from DeepSeek and initial production issues with its new Blackwell chips.<sup>13</sup>

However, DeepSeek's ability to produce a comparable model at one-tenth the cost seriously threatens OpenAI and Anthropic. OpenAI CEO Sam Altman acknowledged the challenge and pledged to accelerate product releases.

The launch of DeepSeek's V3 also casts doubts on the U.S. tech giants' planned \$310 billion AI capital expenditures in 2025. Whether these companies will adjust their strategies remains to be seen, but DeepSeek's breakthrough has already forced a rethink.

### EU impact

In some ways, the DeepSeek disruption came at a fortunate time – Europe was planning to invest large sums of public money and DeepSeek has shown this would not have been an optimal strategy.<sup>14</sup> The EU lags behind in AI technology, with the United States and China currently leading the field. At the same time, the EU is taking a more heavy-handed approach to AI regulation, exemplified by the landmark AI Act, which may hinder its ability to close the technology gap. The EU Act disadvantages European companies compared to their global rivals. The recent EU pledge of €200 billion for AI acknowledges the need to boost investment. The EU has pledged €50 billion in public funds for AI development through existing programs, but the remaining €150 billion relies on attracting private investment, which is not yet fully secured. Still, the EU's real opportunity lies in concentrating research and development efforts on AI applications with high social and economic benefits, both at the macro and micro level, using compact systems with moderate computing requirements.<sup>15</sup>

### Conclusion

If history is a guide, the ability to study and design AI models will accelerate technological innovation in large LLMs because they benefit from large training datasets and generalization, or an AI model's ability to apply what it has learned from its training data to new, unseen situations. Specialized AI, like protein design and drug discovery, advances through incremental, domain-specific breakthroughs, thus, the DeepSeek disruption will not have as large of an impact in this space.<sup>16</sup> These other subsets of AI operate in a more constrained, data-limited environment, require scientific accuracy, and face stricter validation procedures. Finally, at the broader level, AI will accelerate change in employment and productivity, opening the potential to unlock immense economic gains.

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## Notes

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- <sup>1</sup> <https://www.ft.com/content/ea803121-196f-4c61-ab70-93b38043836e>
- <sup>2</sup> *Ibid.*
- <sup>3</sup> <https://www.nytimes.com/2025/01/27/technology/what-is-deepseek-china-ai.html>
- <sup>4</sup> <https://www.bbc.com/future/article/20250131-what-does-deepseeks-new-app-mean-for-the-future-of-ai>
- <sup>5</sup> <https://cyber.fsi.stanford.edu/publication/taking-stock-deepseek-shock>
- <sup>6</sup> <https://www.nytimes.com/2025/02/12/technology/deepseek-ai-chip-costs.html>
- <sup>7</sup> <https://www.reuters.com/technology/tech-stock-selloff-deepens-deepseek-triggers-ai-rethink-2025-01-28/>
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- <sup>9</sup> <https://www.ft.com/content/5b82cd02-983c-4bce-b1b4-3137d7897c3b>
- <sup>10</sup> *Ibid.*
- <sup>11</sup> <https://www.economist.com/leaders/2025/01/29/the-real-meaning-of-the-deepseek-drama>
- <sup>12</sup> <https://www.reuters.com/technology/artificial-intelligence/nvidias-h20-chip-orders-jump-chinese-firms-adopt-deepseeks-ai-models-sources-say-2025-02-25/>
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- <sup>14</sup> <https://blog.funcas.es/lecciones-de-deepseek-para-la-implementacion-de-la-brujula-de-la-competitividad-europea/>
- <sup>15</sup> *Ibid.*
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## Notes

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