The Impact of AI and Future-Proofing the Economy

Informal ECOFIN Meeting – Dublin, September 2026

AI has the potential to lift productivity and growth, while it also carries risks. Fully leveraging the benefits of AI while minimizing risks requires attention across several dimensions. The informal ECOFIN meeting is an opportunity for policymakers to share experiences and discuss in a frank and open setting the various considerations for future-proofing their economies and reaching common goals.

INTRODUCTION

AI could bring opportunities to boost growth. IMF research suggests that five-year cumulative productivity gains for Europe could average around 1 percent, though with eventual outcomes dependent on the evolution of a range of factors, including the speed of adoption (Overview Figure A; Misch and others, 2025a). In this respect, estimates of longer-term gains are typically larger but are also subject to high uncertainty, including as the interaction of technological advances with Europe's economic conditions—from institutions to energy supply—is still being studied.

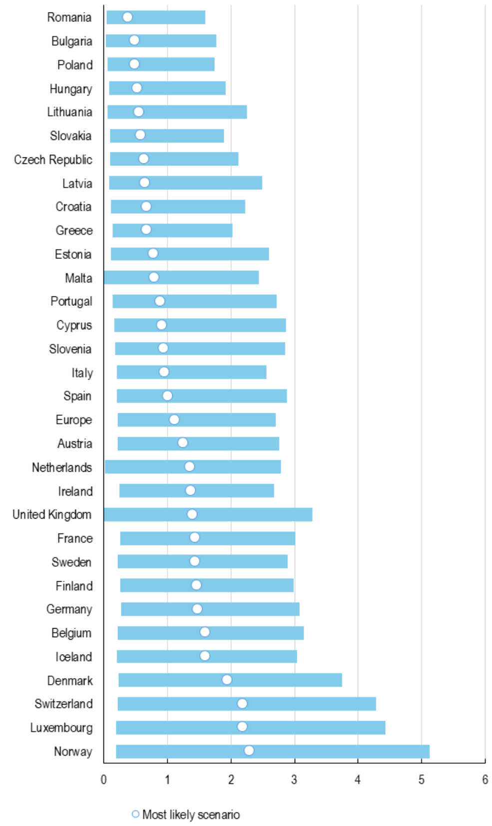
However, countries differ markedly in their starting points and how they are likely to be affected by AI. First, AI ***preparedness*** differs across countries amid variation in digital infrastructure, innovation ecosystems, and the availability of highly skilled labor (Overview Figure B). Second, the extent of ***exposure*** to AI differs, with variations in industrial structures and jobs (e.g., relatively more or less reliant on AI-exposed service sectors) implying significant variation in opportunities for "quick wins." Third, ***access*** to advanced technology through semiconductor manufacturing capabilities, data centers, and technology-sharing practices with partner countries are not evenly distributed. In short, these dimensions interact with countries' differing structural conditions—including labor- and energy-market frictions—so that similar AI shocks translate into different adjustment paths (see the labor and energy sections).

The implications of AI are likely to be wide-ranging and will also carry risks. Several transmission channels will be relevant. For example, the differing impacts across jobs are likely to result in uneven gains across people *within* countries. The distribution of AI-related gains may also be uneven *across* countries. In turn, these developments may heighten the risk of social unrest or conflicts. At the same time, AI brings new opportunities for the public sector—such as through efficiency gains in revenue collection and expenditure targeting through AI adoption—while increased use of AI will also put a premium on the availability of continuous and reliable power. Cyber risks may intensify, providing a role for AI to support effective cyber defense.

Amid high uncertainty, it will be essential to manage in an agile manner both upside opportunities and downside risks—simultaneously and with coordination across countries. While the potential of AI appears great, the overall implications for productivity, labor demand, inequality, and public finances remain highly uncertain. Hence, supporting preparedness and remaining agile are essential to maximize the benefits from AI while limiting social costs. More broadly, policies that encourage innovation while ensuring that the gains from AI-driven productivity growth are broadly shared across society will facilitate the largest payoffs from AI. In essence, the AI transition sharpens the urgency of existing priorities, especially completing the single market and doubling down on productivity-enhancing structural reforms. Amid the shared challenges and opportunities, peer learning, information sharing, and joint action will be vital for stronger, more inclusive and sustainable growth, including because AI can easily cross borders.

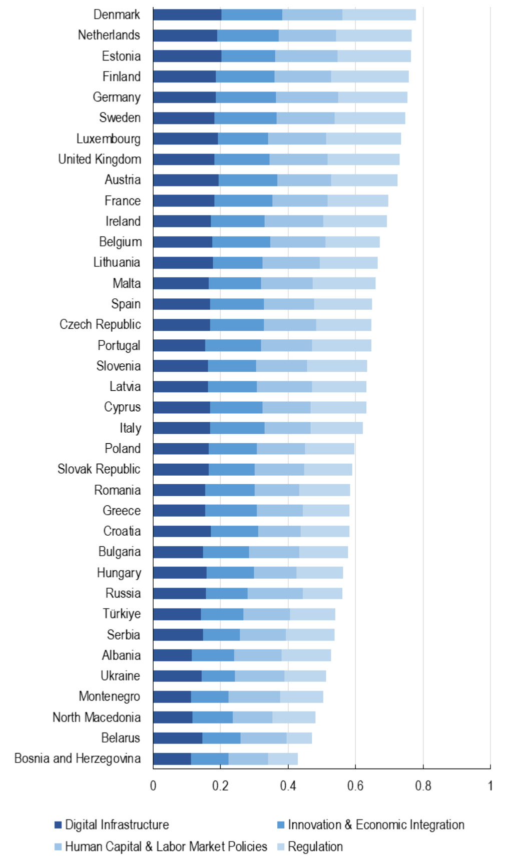
Overview Figure

A. AI Impact on Productivity
(Five-year cumulative TFP gain, percent)



Sources: Eurostat and Misch and others (2025a).
Note: The figure reports, for each country, the range of plausible cumulative medium-term productivity gains across scenarios. Productivity is defined as Total Factor Productivity (TFP). Analysis is based on existing economic structures. "Europe" refers to the average of the countries in the sample.

B. AI Preparedness Dimensions Across Europe
(Percent of GDP; 2023)



Sources: International Labor Organization; Cazzaniga and others, 2024; IMF staff calculations.
Note: Contributions of digital infrastructure, innovation and integration, human capital and policies, and regulation and ethics to AI preparedness. Length of bars indicate the AI preparedness score.

The following pages include four short notes to facilitate discussions. The four notes cover:

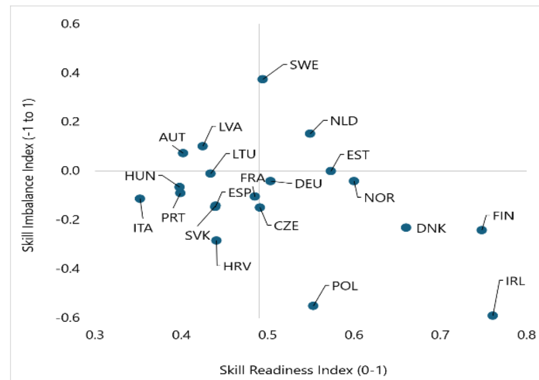
1. Easing the Labor Market Adjustment amid AI Adoption
2. Reaping the AI-Related Benefits for the Public Sector
3. Enhancing Energy Infrastructure for AI
4. Navigating the Geopolitics of AI

1. EASING THE LABOR MARKET ADJUSTMENT AMID AI ADOPTION

AI is transforming jobs and the way we work, with demand for labor shifting across industries and skill levels. To avoid higher structural unemployment and leverage the full potential of AI, it will be essential to ensure labor markets are adaptable and skills are up to date.

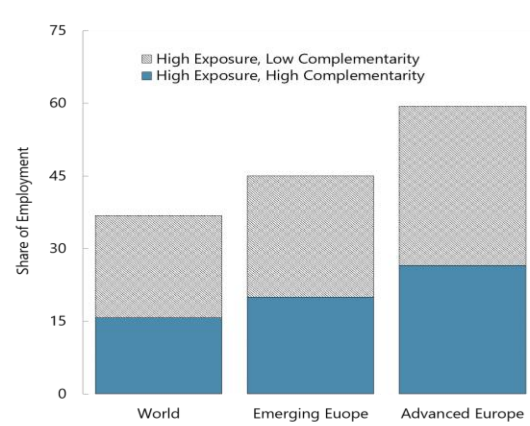
The arrival of AI is reshaping labor demand, widening some existing skill and income gaps while narrowing others. AI is likely to result in increased demand for workers with new, advanced skills that allow them to work effectively with AI and fully leverage associated productivity gains (Jaumotte and others, 2026). At the same time, demand for workers in routine tasks may decline. On net, the impact on jobs—how many are created, replaced, or left unchanged, and how quickly workers move between them—remains uncertain. Moreover, the demand for different types of skills will depend crucially on how AI changes the sectoral structure of the economy as well as policy actions. Levels of AI readiness in terms of skills also vary substantially across Europe (Figure 1.1, horizontal axis), and the relative shift in demand toward workers with new, AI-ready skills and away from workers employed in routine tasks that AI can automate could worsen skill mismatches (Figure 1.1, vertical axis). As demand for workers shifts, relative wages are likely to adjust accordingly, with potentially uneven impact across occupations and a resulting increase in income inequality within countries.

Figure 1.1. Skill Imbalance and Readiness



Sources: ILO; Lightcast; OECD; Jaumotte and others, 2026.
Note: The *Skill Imbalance Index* is calculated as the difference between (i) the projected new skill demand relative to the United States and (ii) the share of graduates with new skills relative to the United States, normalized by the maximum absolute value of these differences to range between –1 and 1. Countries with positive (negative) values have higher (lower) projected skill demand relative to supply. The *Skill Readiness Index is* the average of four normalized components: i) graduates with new IT skills; ii) graduates with new non-IT skills; iii) average adult skills in literacy, numeracy, and adaptive problem-solving, reported by OECD; and iv) adult participation in job-related learning.

Figure 1.2. AI Exposure and Complementarity
(Percent)



Sources: ILO; Cazzaniga and others (2024).
Note: Bars show the share of employment in AI-exposed occupations, split into high-complementarity roles (where AI more likely augments workers) and low-complementarity roles (where it more likely substitutes for them). Group shares are working-age-population-weighted averages. Advanced Europe includes AUT, BEL, CHE, CYP, CZE, DEU, DNK, ESP, EST, FIN, FRA, GBR, GRC, HRV, IRL, ISL, ITA, LTU, LUX, LVA, MLT, NLD, NOR, PRT, SVK, SVN, SWE. Emerging Europe includes ALB, BGR, BIH, BLR, HUN, MKD, MNE, POL, ROU, RUS, SRB, TUR, UKR.

The exposure of workers to AI differs markedly across occupations, and AI-complementarities can mitigate adverse risks for some exposed workers. IMF analysis finds that about 60 percent of workers in advanced European economies are employed in highly exposed occupations, compared to 45 percent in emerging Europe and 40 percent worldwide (Figure 1.2). Yet, even for people in highly exposed occupations, the impact of AI may vary significantly. About half of highly exposed jobs are occupations in which AI can complement workers and raise their productivity (e.g., professionals and other high-skilled workers such as judges and managers) (Cazzaniga and others, 2024). In contrast, people in jobs that are highly exposed to AI but have low AI complementarity (high substitutability) (e.g., clerical services and some retail jobs) are at relatively high risk of displacement, as AI increasingly can handle routine tasks.

AI-related job displacement is likely to vary across demographics. College-educated workers tend to be better prepared to leverage AI complementarities or to move from jobs at risk of displacement to jobs that are complementary to AI. Many **young** people may also find it easier to adapt to a new career path, compared with older workers who have had a long career in highly exposed occupations—though the net effect is uncertain, as entry-level job risks are emerging as AI takes over some of the routine tasks that have traditionally helped start careers (Jaumotte and others, 2026). **Gender** disparities may also arise. For example, generally higher AI exposure among women than men given differences in their employment structures (e.g., sectoral differences), combined with sectoral differences in AI complementarities, mean that women will likely face both greater AI-related risks as well as opportunities than men (Cazzaniga and others, 2024).

As economies adjust to the arrival of advanced technology, policymakers can facilitate the adjustment by supporting labor reallocation and skill development. In addition to ensuring that education systems equip students with creative and problem-solving skills that complement AI, it will be essential to facilitate the transition to new jobs for workers adversely impacted by AI substitutability. This requires retraining toward employment in new or expanding occupations. As the adjustment may take time, including as technological advances continue to evolve, strong active labor market policies that ensure access to training and foster life-long learning should be an integral part of the response. Fiscal policy will also have an instrumental role in helping workers adapt to the need for new skills, including through modernized unemployment insurance and income-support systems, while maintaining incentives for labor force participation and on-the-job skills acquisitions. Further integration of labor markets across borders will facilitate mobility of workers to where they are in highest demand.

2. REAPING THE AI-RELATED BENEFITS FOR THE PUBLIC SECTOR

AI has the potential to fundamentally transform how the public sector interacts with the rest of the economy. AI may strengthen revenue administration and improve taxpayer compliance and collections and thereby support public finances. AI can also help increase the efficiency of public services, such as by delivering quicker and easier completion of routine processes and improving spending efficiency.

AI has the potential to enhance public administration efficiency across both revenues and expenditures.

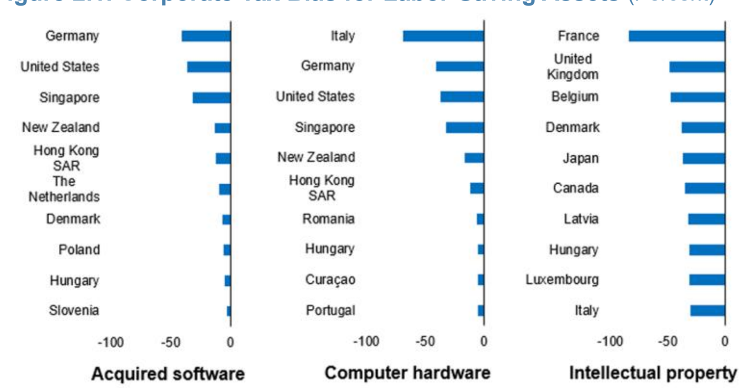
- *Enhancing revenue administration.* Examples of potential improvements in revenue administration can be found across a range of areas, including tax administration, compliance monitoring, and fraud detection. For example, recent IMF work highlights that AI can strengthen compliance risk management by helping tax and customs administrations to better identify risks, understand behaviors, and support strategies that more effectively integrate enforcement actions. Potential use cases include various situations in which AI can facilitate comprehensive data analysis (e.g., to support customs officials in investigating trade mispricing or to support tax officers in compiling information on a company under audit).

- *Enhancing spending efficiency.* On the expenditure side, AI tools can aid expenditure management and the targeting of public programs. If implemented effectively, these tools can enable governments to deliver higher quality services and better outcomes with limited fiscal resources. Potential applications are broad and include procurement anomaly detection and budget document analysis.

As part of these efforts, human judgment remains essential. In particular, it will be important that the use of AI complements established risk models, derived from human expertise (Aslett and others, 2024 and 2025). In addition, when leveraging AI responsibly, sustainable gains require adequate digital infrastructure, institutional capacity, and strong governance frameworks, including to ensure the necessary data protection, confidentiality, accountability, and human oversight.

As the economy adopts AI, it will also be essential to address any distortions in the tax treatment of capital and labor. To the extent that AI substitutes for certain labor inputs, it may increase the share of income accruing to capital relative to labor, with impacts on tax bases and collection. Further, existing tax systems may unintentionally favor capital investments over labor. IMF analysis finds that tax systems can influence whether firms adopt AI in labor-augmenting or labor-replacing ways (Figure 2.1; Brollo and others, 2024). Hence, it will be important to address the potential implications of distortions due to differences in the taxation of capital and labor, without unduly discouraging innovation.

Figure 2.1. Corporate Tax Bias for Labor-Saving Assets (Percent)



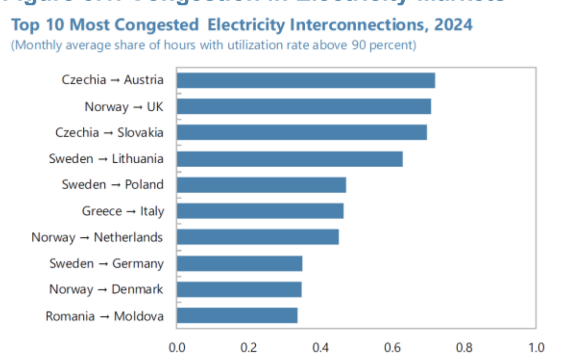
Sources: OECD, "Corporate Tax Statistics 2023"; ZEW (2021); and Brollo and others (2024).
Note: The figure shows the 10 economies with the largest corporate tax bias favoring labor-saving assets. The bias is measured as the Marginal Effective Tax Rate (METR) for each asset type relative to the METR for buildings (as buildings are considered complements to labor) and is based on a sample of 85 economies for 2022 for acquired software and computer hardware. For intellectual property the sample covers the EU-27 for 2020. Negative values denote a lower METR on the asset relative to buildings.

3. ENHANCING ENERGY INFRASTRUCTURE FOR AI

Data center demand is geographically concentrated, is expected to substantially increase, and requires highly reliable power. As AI expansion affects electricity prices and grid investment, ensuring the provision of affordable and reliable energy is vital.

AI is rapidly increasing the demand for electricity, raising questions about whether the current energy system can deliver the necessary power. European data centers already consume around 3 percent of European electricity, and Europe is likely to face a material increase in electricity demand from AI-related data centers during the next few years. The increase will be driven mainly by hyperscale and co-location facilities, with AI training and inference adding to already growing cloud demand.[1] That said, the extent of the increase will depend on the speed of AI adoption, the share that is hosted in Europe, and the degree of energy efficiency improvement.

Figure 3.1. Congestion in Electricity Markets



Source: D'Arcangelo and others (forthcoming).
Note: Congestion is measured as the daily average share of hours with use rate over 90 percent.

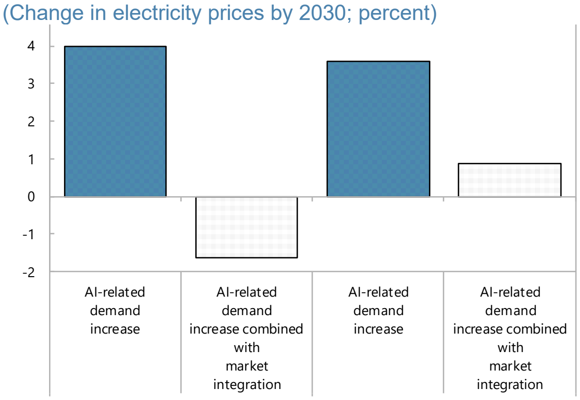
The impact on electricity demand is expected to be uneven across Europe, with local pressures arising where data center energy demand exceeds local grid capacity. Data center demand in Europe is geographically concentrated. Although new projects are spreading to southern Europe and the Nordic countries, most data centers are concentrated in Frankfurt, London, Amsterdam, Paris, and Dublin, leading to a rise in energy demand in busy urban areas, putting additional pressure on local power networks and contributing to congestion in electricity markets (Figure 3.1). Locational choices for data centers are increasingly driven by proximity to AI-technology users and available skills, and not necessarily by low energy costs. In fact, the most favorable locations for low-cost wind- and solar-generated power are often away from these urban areas. As power grids, substations, and cross-border links take time to build, risks are increasing that insufficient grid capacity and weak coordination become key constraints for energy supply to meet heightened AI-related demand.

Further updating and integrating the European energy grid and enhancing renewable energy supply can help manage adverse price effects of the AI-related increase in energy demand. IMF analysis points to increasing risks when infrastructure does not keep pace with demand (Bogmans and others, 2025). Moreover, aggregate pressure on electricity generation may be further exacerbated if accompanied by connection delays, congestion, and price pressures in areas where data-center demand is concentrated. IMF analysis finds that better cross-border connectivity and a more integrated EU electricity market can ease these pressures by making it easier to move cheaper power across countries to where needs are the highest, helping to keep prices more stable and the system more reliable (Figure 3.2; D'Arcangelo and others, forthcoming).

[1] Hyperscale facilitates are large-scale facilities, typically with thousands of servers and operated by major cloud service providers. Co-location facilities are facilities where servers are located in rented space, with co-location facilities often hosting multiple clients.

Policymakers can facilitate the adjustment through joint actions. Europe faces an energy-related coordination challenge. Data-center demand, renewable potential, and grid capacity vary widely across countries, while electricity markets remain only partly integrated. Limited cross-border interconnection and fragmented rules for large electricity users make it difficult to match demand with low-cost, low-carbon supply. In turn, aligning data-center location and grid connection decisions with available network capacity, access to low-carbon power, land constraints, and the cost of grid upgrades would help ease bottlenecks. Overall, stronger European integration and coordination—including on data-center siting, infrastructure planning, and electricity-market integration through a European power grid—will be key to effectively meeting the increasing energy challenge, easing local bottlenecks, and facilitating the continued use of AI to boost productivity and growth. All countries would gain, including countries with low-cost electricity from leveraging gains of trade and reduced volatility. Since taxes and levies accounted for up to 40 percent of the EU-U.S. price gap in recent years, reducing electricity excises and non-energy charges would also help EU cost competitiveness.

Figure 3.2. Impact on Prices
(Change in electricity prices by 2030; percent)



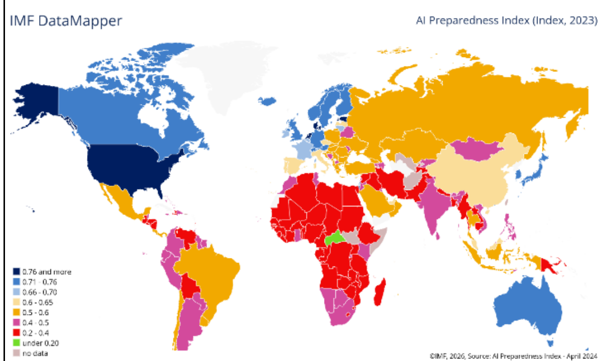
Source: D'Arcangelo and others (forthcoming).
Note: Blue bars show impact of higher AI-related data-center demand. Grey bars show impact when the demand increase is accompanied by stronger electricity-market integration. The left bars show the results for the EU27 simple average, while the right bars concern the EU27 average weighted by electricity demand.

4. NAVIGATING THE GEOPOLITICS OF AI

As AI's importance is increasing in the global and European economies, its adoption will also carry differentiated risks across economies. This note focuses on three distinct challenges with European and international implications: (i) asymmetric gains across countries; (ii) supply-chain and strategic dependencies; and (iii) financial stability and data security risks. Focus must remain on reaping the benefits of AI while mitigating risks. Amid common challenges, international cooperation will be essential.

Potential gains from AI are likely to be unevenly shared across countries, raising the possibility of costly frictions. Leveraging the IMF's Global Integrated Monetary and Fiscal Model (GIMF; Kumhof and others, 2010), Cerutti and others (2025) find that global GDP could expand by close to 4 percent over ten years in a high-TFP-growth scenario, relative to steady state. However, advanced economies are found to benefit disproportionately given their relatively high degree of exposure and preparedness—with the estimated growth impact for advanced economies potentially more than double that in low-income countries. In turn, in addition to its likely adverse impact on within-country inequality, AI may contribute to worsening cross-country income divergence, potentially increasing the risk of conflict. These patterns are also likely to occur across Europe, amid differences in sectoral structures and AI preparedness (Figure 4.1). Finding ways to share the benefits of AI across countries and regions will help avoid conflict and sustain economic gains.

Figure 4.1. AI Preparedness



Source: IMF AI Preparedness Index.

Within Europe, ensuring that the economic benefits of AI can be robustly shared will require a solid base for innovation and AI adoption, and policy action at both national and European levels. To reap the full benefits of AI across all countries, advancing structural reforms to ensure broad-based AI preparedness will be essential. In addition to reforms at the national levels, completing the single market for goods, labor, and capital is urgent. Notably, access to risk capital is typically needed for small, young firms to be able to innovate, and Europe's fragmented and shallow capital markets appear an important detractor to AI development and gains. It will also be important to calibrate the regulatory environment to ensure the safe use of AI while retaining incentives for firms to innovate and adopt advanced technology.

The EU will also need to consider how best to protect against external supply risks. Currently, the main AI creators are located outside of Europe (e.g., in China and the United States). Amid a challenging global geopolitical environment, consideration regarding how best to mitigate potential implications of supply disruptions may be warranted. For example, if access to foreign leading models were to be disrupted, costs in Europe could increase sharply and AI capabilities could be hampered. Yet, individual firms in Europe may not currently have the incentives to invest in costly domestic alternatives even though such alternatives could become collectively valuable in the event of supply chain disruptions. Complementing high-quality growth-enhancing reforms with targeted policies could therefore be considered. For example, coordinated policies that enhance the European ecosystem (e.g., data center capacity, energy infrastructure, diversified chip supply chains) could help reduce vulnerabilities to supply disruptions. In considering such options, it will be important that governments carefully weigh costs and benefits of intervention, ensure coordination within the EU, and target support toward identifiable external vulnerabilities and market failures. Throughout, it will be key to avoid stifling the innovative power of markets in Europe.

While encouraging an enabling environment for technology adoption, financial stability risks also require attention. As AI capabilities strengthen, these capabilities can amplify cyber risks. Adrian and others (2026) explain that this can occur through highly interconnected digital infrastructures, including software, cloud services, and networks for payments and other data. In turn, AI-enabled cyber tools mean that risks are increasingly systemic and cut across sectors, with a potential exploitation of vulnerabilities quickly broadening across institutions, country borders, and financial markets. Widespread use of AI models and algorithms could also accelerate financial market movements, potentially amplifying shocks. In sum, should cyber risks materialize, they can have macro implications. Fortunately, AI can also be part of effective cyber defense. In this respect, cyber stress-testing and scenario analysis can be critical components of ensuring continued financial stability. As many of these challenges reflect common risks, further enhancing international cooperation and information sharing will be essential.

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