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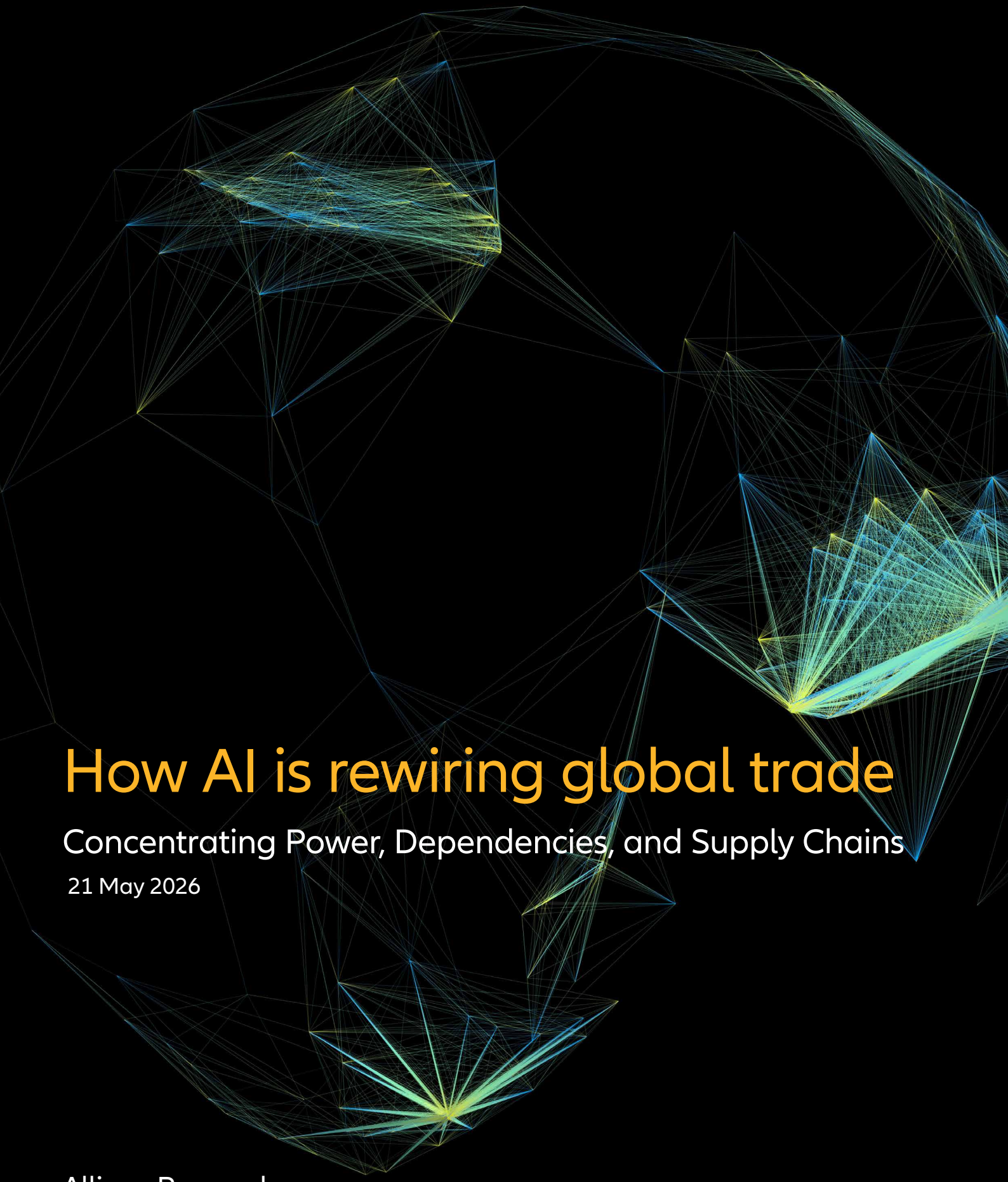

# How AI is rewiring global trade

## Concentrating Power, Dependencies, and Supply Chains

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Allianz Research

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# Executive Summary

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AI and trade are no longer separate policy domains. AI growth depends on globalized supply chains for semiconductors, computing infrastructure and digital services while trade is increasingly shaped by who controls AI infrastructure, data flows and cloud capacity.

- **Trade openness is a structural precondition for AI-driven productivity gains.** Open economies benefit disproportionately from cheaper inputs, faster innovation diffusion and AI adoption spillovers. Trade openness accounts for 23% of the variation in AI adoption across countries with highly open economies, such as Singapore, UAE and Ireland, leading in diffusion. However, while AI can significantly boost growth, its benefits are unlikely to be evenly distributed.

- **Export volumes of AI-enabling goods have surged from USD1trn in 2014 to USD3.8trn in 2025 (+280%), accounting for 15% of global trade and far outpacing the 40% growth in goods trade overall.** Asia dominates the supply side, accounting for 65% of global AI-related exports and seven of the top ten exporters, led by China (18% of AI-related exports), Taiwan (12%) and Hong Kong (11%). The composition remains concentrated in intermediate inputs (76%) and equipment (23%), reflecting deep dependence on semiconductors and data-center infrastructure. On the demand side, the US has tripled its AI-related imports since 2023, underpinned by 5,427 operational data centers, 45% of the global total. Europe's import growth of just +40% underscores a widening infrastructure gap.

- **Services imbalances could scale with AI.** ICT services trade reached USD900bn in 2024 (11% of global services trade), with Ireland alone exporting USD173bn, exceeding both the rest of the EU (USD142bn) and the US (USD108bn), and reflecting its role as a billing hub for US multinationals. However, it masks structural dependence, with the EU excluding Ireland running a USD45bn ICT services deficit (mainly with Ireland), highlighting its reliance on US digital ecosystems. And things could get worse. Hypothetically, if the AI services subscription penetration rate of US providers such as ChatGTP Plus and Claude Pro increases from 3% to 50% in a high adoption scenario in the Eurozone, annual payments to US providers could reach EUR34bn (currently EUR2.7bn), equivalent to 20% of the current EU–US goods services deficit. AI thus acts as a scalable, recurring channel that exacerbates structural EU–US digital imbalances and has the potential to lower the US overall trade deficit.

**Beyond the headline data, three structural dynamics are reshaping the global AI trade order:**

**1. Supply chain concentration as single points of failure**
The AI supply chain is concentrating rapidly at the technological frontier. Taiwan, South Korea, the US and the Netherlands dominate the production of advanced chips, high-bandwidth memory and semiconductor equipment, creating critical single points of failure with no near-term redundancy. Unlike broader goods trade, which has partially reoriented along geopolitical lines, AI-related goods remain largely unfragmented across geopolitical blocs, with semiconductors and key components still flowing globally except at the technological frontier (notably advanced US export controls) due to deep interdependencies, challenging the narrative of technological decoupling.

**2. Infrastructure as geopolitical power**
Control over data centers, cloud infrastructure and computing capacity is emerging as a primary source of geopolitical leverage, distinct from traditional goods trade dynamics. Europe's strategic exposure is acute. With less than 10GW of operational data-center capacity, four times below the US (60GW), and a development pipeline six times smaller, the gap is not expected to narrow. US hyperscalers already control 35% of European computing capacity and account for nearly half of the upcoming pipeline, consolidating a 70% cloud market share. Structural constraints, fragmented regulation, complex permitting processes, grid connection delays, no domestic hyperscaler and limited VC or state-backed funding reinforce this dependency. Finally, reliance on Asian hardware inputs complements the US dependence that will increase without sufficient EU investment in the area. Under that backdrop, Europe is permanently under the threat of a US "kill switch" on cloud data. In the meantime, this effective expansion of this key infrastructure is dependent on inputs sourced in Asia, notably in China (14% import ratio for AI datacenter components) and Taiwan for semiconductor, and as a result exposed to current supply-chain disruption risks along new geopolitical tensions in Middle East. Regaining control and strengthening sovereignty on AI good production but also service delivery is critical for the region to avoid suffering a twin external dependence.

**3. Industrial policy: from subsidies to protectionism**
Global tariffs on AI-enabling goods have fallen from 5.6% in 2015 to 2.8% in 2025, well below the 7.8% average for manufacturing overall, but non-tariff measures have surged, driven primarily by the US and China, reflecting a strategic shift from financial support toward technology protectionism. Over 3,600 AI subsidy measures targeting critical materials, semiconductors, GPUs, computing equipment and optical fibers are now in force globally, with China having nearly doubled its trade coverage over five years, followed by South Korea, Malaysia, the US and Japan. The overlap of national and multilateral governance regimes is concentrating production, infrastructure and modelling capabilities in the hands of a small number of economies. Regulatory fragmentation is becoming a binding constraint on AI services trade, with ICT trade restrictiveness already explaining 5% of the cross-country variation in AI services flows. The EU and US are advancing incompatible regulatory frameworks, creating compliance friction that reinforces existing structural imbalances.

# An AI boom built in Asia

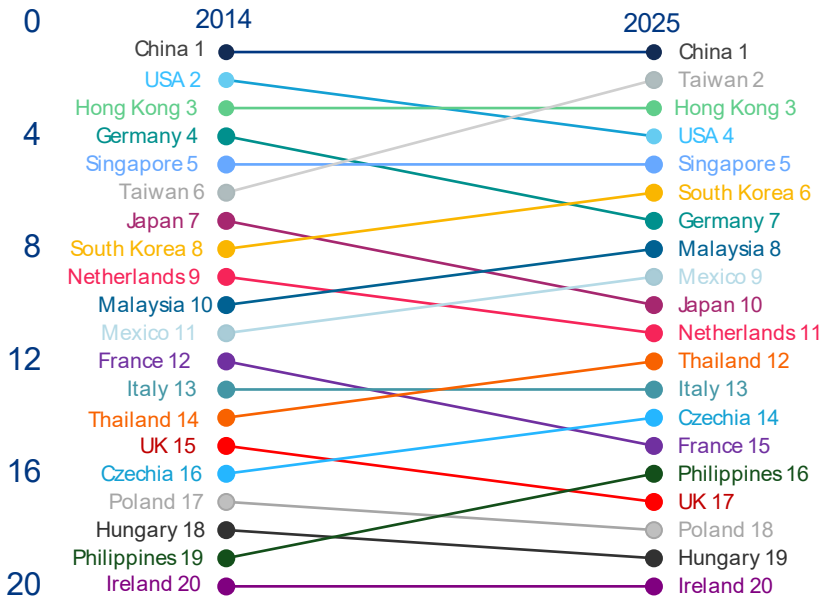
**AI fundamentally depends on global trade in goods and services, with a complex, internationally fragmented value chain spanning raw materials, semiconductors, computing hardware, cloud infrastructure, data and final applications (AI-enabling goods).** Trade enables access to critical inputs, such as advanced chips, specialized equipment and energy resources, while facilitating the cross-border exchange of intermediate goods, services and knowledge needed to build and scale AI systems. However, the strong geographic concentration of key stages of the AI supply chain coupled with heightening frictions tightening the exchange channel (tariffs, shutdown of the Strait of Hormuz) raises concerns about unequal access and the risk of a widening technological divide.

**Over the past decade, global trade in AI-related goods has doubled, far outpacing the growth of overall goods trade and of non-AI-related goods in particular.** Global AI-related goods trade has expanded rapidly over the past decade, doubling from USD1.9trn in 2014 to USD3.8trn in 2025. Meanwhile, overall global trade in goods increased more moderately, rising by +40% to USD26trn in 2025. This growth was increasingly supported by AI-related sectors, with trade in non-AI goods rising by only a third. This expansion has seen three distinct acceleration phases. The first acceleration occurred in 2017–2018 (+15% y/y and +11% y/y respectively), driven by fundamental developments in need for AI-related goods and the introduction of the transformative architecture, which underpins most large language models. A second surge followed in 2021 (+30% y/y), driven by the release of early large-scale models, including GPT-3 (2020) and DALL·E (2021) and paving the way for the emergence of generative AI in 2022, which needed more confounding technical infrastructure for model innovation and computation. However, momentum weakened in 2022 amid a challenging macroeconomic environment. Higher interest rates and elevated inflation combined with the introduction of US export controls on advanced AI chips and semiconductors, led to a marked deceleration in AI-related goods trade growth (+4% y/y in 2022), followed by a contraction in 2023 (-7% y/y), with export values falling below their 2021 peak. More recently, advances in multimodal and agentic AI systems have reignited investment momentum. As AI became increasingly available and embedded in the economic system, AI-related goods exports reached new heights in 2025

(+22% y/y). Early 2026 data, covering January and February, show that the boom continues, especially in countries such as Taiwan (+62% y/y) and South Korea (+105% y/y).

**Asia has firmly established itself as the center of global trade in AI-enabling goods.** The region accounts for 65% of global exports and dominates the entire value chain. The region is at the heart of an increasingly concentrated landscape, with seven of the top ten exporters representing 80% of global trade. China leads with a 18% share, followed by Taiwan (12%) and Hong Kong (11%). Singapore (7%), South Korea (6%), Malaysia (4%) and Japan (3%) also reinforce the region's strength. The US (8%), Germany (5%) and Mexico (4%) are the only non-Asian economies in this group, highlighting the strong presence of AI trade in Asia. This dominance has deepened over time as competitive dynamics have shifted in the region's favor, causing advanced economies to lose ground. Despite a slight decline in its share (-3pps), China remains the leading exporter, while Taiwan's rise from 6th place in 2014 to 2nd place in 2025 (+7pps) marks the most significant shift. This was supported by a +53% year-on-year export surge in 2025 (Figure 1). Hong Kong has also gained prominence, further reinforcing Asia's lead. At the same time, emerging players are gaining traction: Mexico recorded the fastest growth in 2025 (+62% year on year), while Malaysia, Thailand (+49% year on year) and the Philippines are expanding as alternative hubs. Together, they accounted for 11% of global trade (+3pps) and 18% of additional trade in 2025. By contrast, most advanced economies, including those in Europe, have lost ground. The US, for example, slipped from second to fourth place, reflecting a relative decline in manufacturing-based AI trade despite continued strength in high-value innovation.

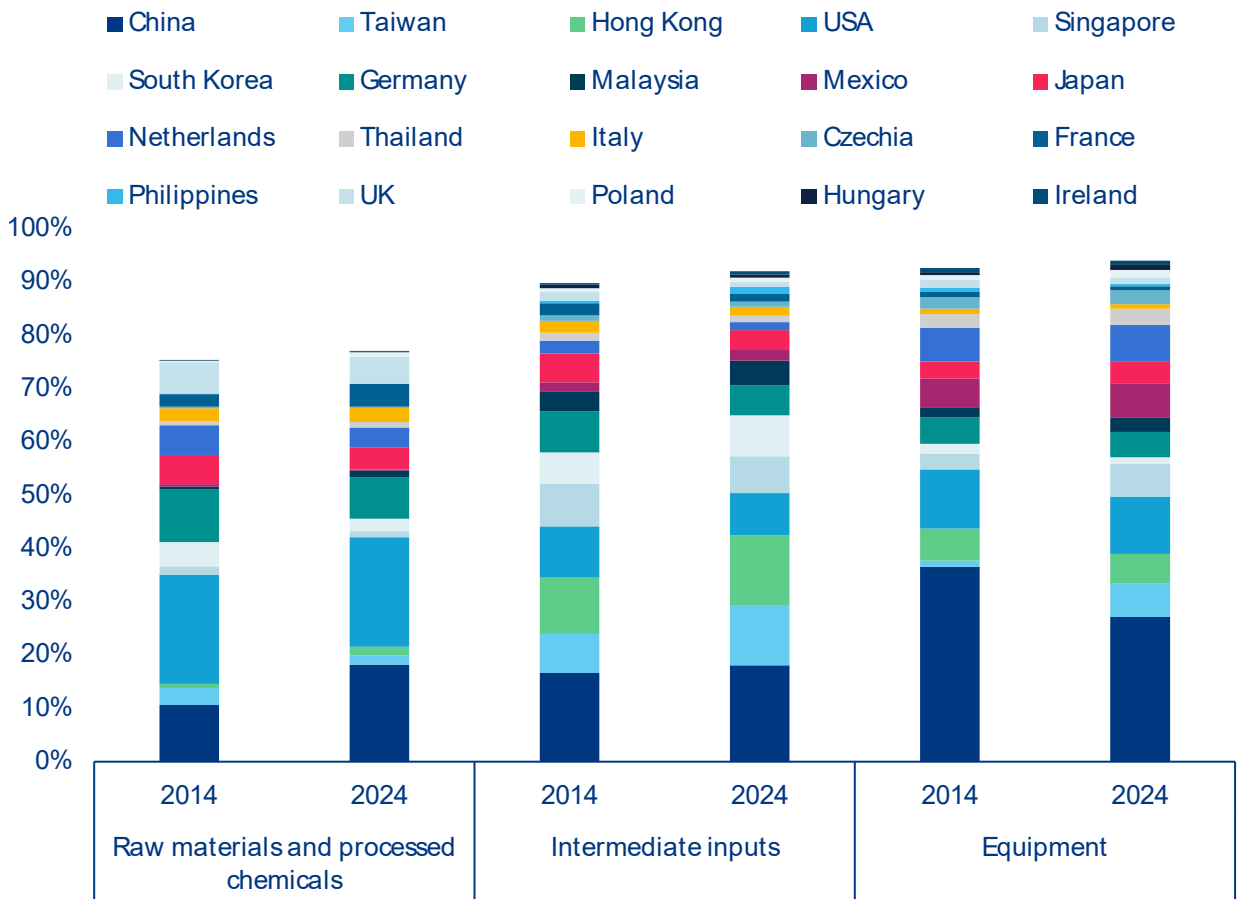
**Figure 1:** Top 20 AI-enabling goods exporters ranking (2014 vs 2025)




Sources: UN Comtrade, National Customs, Allianz Research

**Although AI-enabling goods trade is already highly concentrated globally, the value chain reveals even greater specialization.** Leading exporters cluster at distinct stages, particularly in raw materials, processed chemicals and equipment. AI-enabling goods can be categorized into three groups: raw materials and processed chemicals, intermediate inputs and equipment. Raw materials and processed chemicals constitute critical substances that are fundamental to the fabrication of AI equipment. At the aggregate level, this category represents the most diversified segment of the AI value chain. The top 20 exporters in this category account for three-quarters of global exports. This indicates significant concentration of the primary inputs for AI development, and this concentration only strengthens further upstream in the value chain, with the top 20 exporters representing over 90% of exports in the intermediate inputs (processed or partially manufactured goods) and equipment categories (specialized tools and machine components essential for AI development). China and the US have a particularly pronounced footprint at the extremes of the value chain. Together, they account for 39% of global exports of both raw materials and processed chemicals, as well as equipment (Figure 2). For intermediate inputs, the level of concentration remains high in absolute terms, but it is comparatively more evenly distributed, with China, Hong Kong and Taiwan collectively representing 43% of global exports, and each country holding a similar share. Notably, shifts in countries' global export shares of intermediate inputs have been linked to changes in the overall ranking. Taiwan and South Korea have gained +4pps and +2pps, respectively, reaching 11% and 8% of the global export share. Similarly, Hong Kong's share has increased by +3pps to 13% over the past decade. However, this has not allowed it to become the second-largest exporter, as Taiwan has made a notable entry at the high end of the value chain. It has gained +5pps to reach a 6% export share in equipment; it is the only country, alongside Singapore, to have increased its export share in this category. This has come at the expense of China, which has lost -9pps and stands at a 27% export share.

**Figure 2:** Decomposition of the AI value chain (% share of global trade for each category 2014 vs 2024)




Sources: UN Comtrade, National Customs, Allianz Research.

**An ultra-segmented AI supply chain, with Europe holding a modest role.** The global AI ecosystem is sharply segmented geographically. Upstream activities – chip design, semiconductor equipment, data-center infrastructure and telecoms – are concentrated in Western economies, with the US dominating GPU/CPU architecture and Europe and Japan leading in lithography and wafer-production machinery. Downstream, Asia takes over almost entirely: China holds a critical position in rare earth processing, battery manufacturing and electronic components; South Korea and Taiwan anchor the foundry landscape, the former specializing in memory chips and the latter as the undisputed leader in advanced logic manufacturing. Malaysia and Thailand have developed strong packaging and assembly capabilities, with Thailand increasingly focused on data-center hardware. Critical raw materials are similarly dispersed – nickel from Indonesia and Australia, cobalt from the DRC, lithium from Chile, helium from Qatar, silicon from China. Europe's position across this architecture is, overall, low to moderate, leaving the region with limited strategic leverage and meaningful exposure to supply-chain disruptions at any of its key upstream or downstream nodes.

**The trade of goods related to AI is dominated by intermediate inputs and equipment, reflecting a surging demand for high-performance AI infrastructure.** Although raw materials and processed chemicals account for only 2% of the trade in AI-enabling goods, exports are dominated by intermediate inputs (76% of total AI-related exports) and equipment (23%). This masks significant country-level specialization and exposure to supply risks. The UK stands out in the upstream sector, with a 7% share of raw materials (+5pps above the global average). At the intermediate stage, the strongest concentration is in Asia: South Korea and the Philippines rely heavily on this segment (95% and 91% respectively), as do Hong Kong and Taiwan, all of which are well above the global average of 75%. European exporters such as Italy (84%) and France (83%) exhibit comparable, albeit less pronounced, patterns. At the downstream stage, equipment exports are more prevalent in the Netherlands (57%), Mexico (49%), the Czech Republic (45%) and Thailand (43%). Meanwhile, China and the US have a more balanced approach, with each country having a 68% share of intermediate inputs and equipment shares of 31% and 28%, respectively.

## Box: The Middle East crisis could send semiconductor prices surging

**Over the past two years, two-thirds of the expansion in Asian semiconductor exports were due to price increases and one-third due to higher volumes.** Risks of energy shortages from the Middle East crisis could send prices even higher, given the already tight and extremely concentrated supply. Looking at the recent results of the biggest foundry worldwide located in Taiwan (70% market share in 2025) as a proxy for the advanced-node segment of the supply chain, wafer shipments grew +28% year-on-year in Q1 2026, a robust rate by historical standards. However, revenue in USD terms expanded by +40.6% over the same period, leaving a gap of approximately 12pps that cannot be attributed to volume alone. The explanation lies primarily in a structural shift in product mix rather than in nominal price increases on comparable goods. Taiwan's production capacity base has migrated progressively toward 3nm and 5nm process technologies, which carry substantially higher per-wafer prices than the legacy nodes they are displacing in the revenue composition; advanced technologies now account for 74% of total wafer revenue despite representing a modest share of physical units shipped. However, a look at China's trade statistics suggest that inflationary effects are rather broad-based as even for the less advanced chips used for industrial purpose – above 28nm – we observe a diverging trend between export volumes (downward) and value (upward) in Q1 (Figure 3, right). Chinese data show that strong volume on AI products is masking rising disruption risks in manufacturing production (over -10% contraction of global shipments of smartphone and computer estimated this year, Figure 3, left), as well as for some electric and mechanical devices (i.e., transistors, printed circuits, HVAC, batteries) that are critical for building up the data-center fleet.

**Figure 3:** China exports value, total & high-tech goods (left) and China exports value & volume, semiconductor in USD, 12-month trailing yoy% (right)

Sources: China National Customs, Allianz Research

**The sustained increase in semiconductor pricing is best understood as a demand-led phenomenon, with supply-side constraints serving as an amplifying mechanism.** The commercial deployment of large language models from late 2022 onwards ramped up the compute requirements of hyperscale cloud operators. Since then, the transition from AI model training to large-scale inference has extended and broadened the requirement for advanced silicon across a wider range of end-users. Naturally, this is squeezing supply: Leading-edge foundry capacity requires three to five years and capital commitments in the tens of billions of dollars to come online. The imbalance between demand urgency and supply inelasticity has given foundries meaningful pricing power, with Taiwanese semiconductor producers' gross margins expanding from 58.8% to 66.2% within a single year. Supply-side cost pressures related to critical materials, notably gallium, germanium, tungsten and antimony, all subject to successive rounds of Chinese export controls since 2023, are another increasingly consequential factor, with affected material costs rising in the range of 30-50%, though they are more of a medium-term geopolitical risk for now.

**The fact that the majority of AI-enabling goods exports are driven by a small group of countries also makes their trade model highly vulnerable to potential shocks.** Taiwan and Hong Kong are the most exposed to an AI bubble burst, with 74% and 59% of their exports being related to AI goods respectively (Figure 4). They are followed by Singapore and the Philippines (both 47%), Malaysia (43%) and South Korea (32%). In contrast, trade in AI-enabling goods accounts for 15% of US exports, indicating that American exports are relatively well diversified. Similarly, Mexico and Thailand (both 23%), China (19%), and Japan (18%) have a moderate level of export concentration in AI-enabling goods.

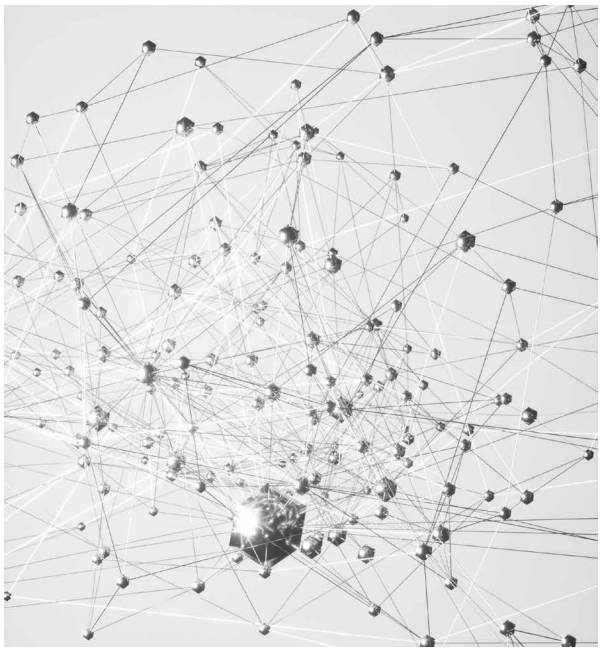
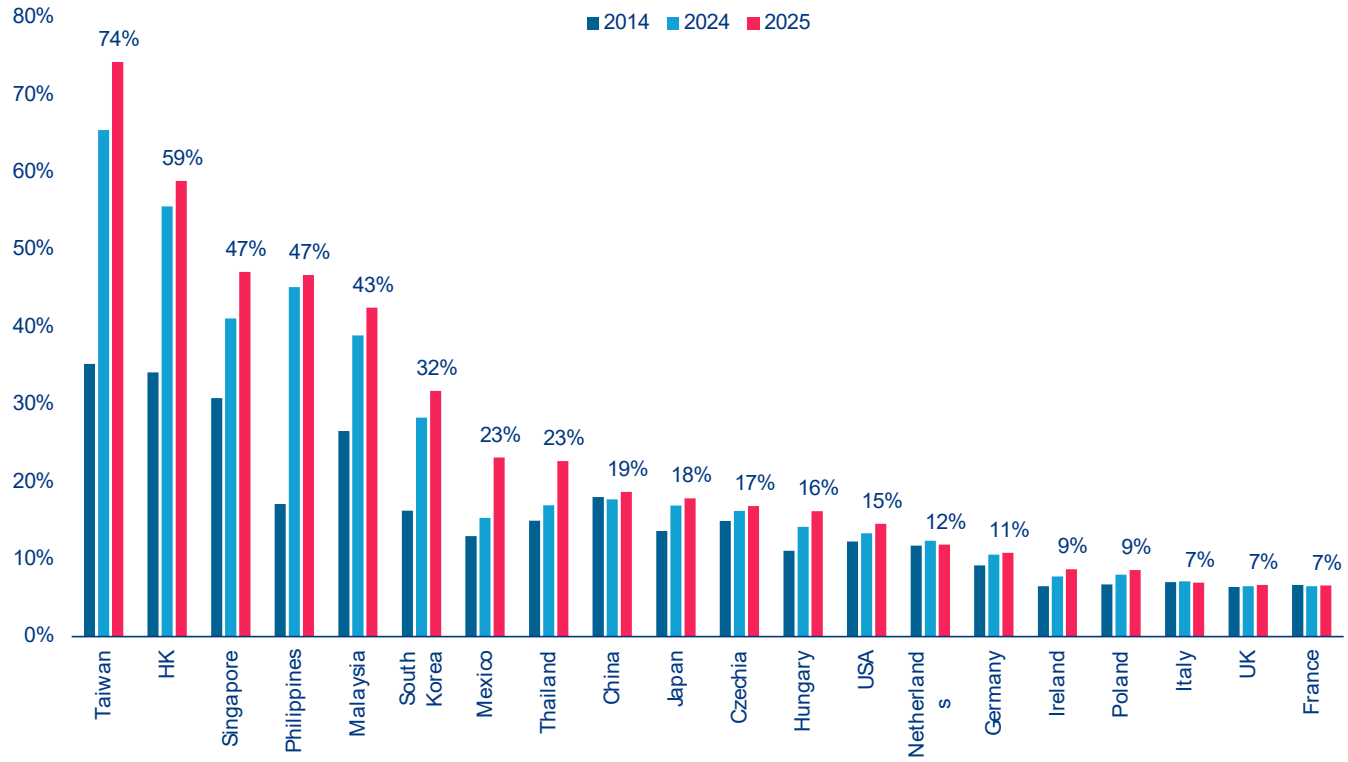


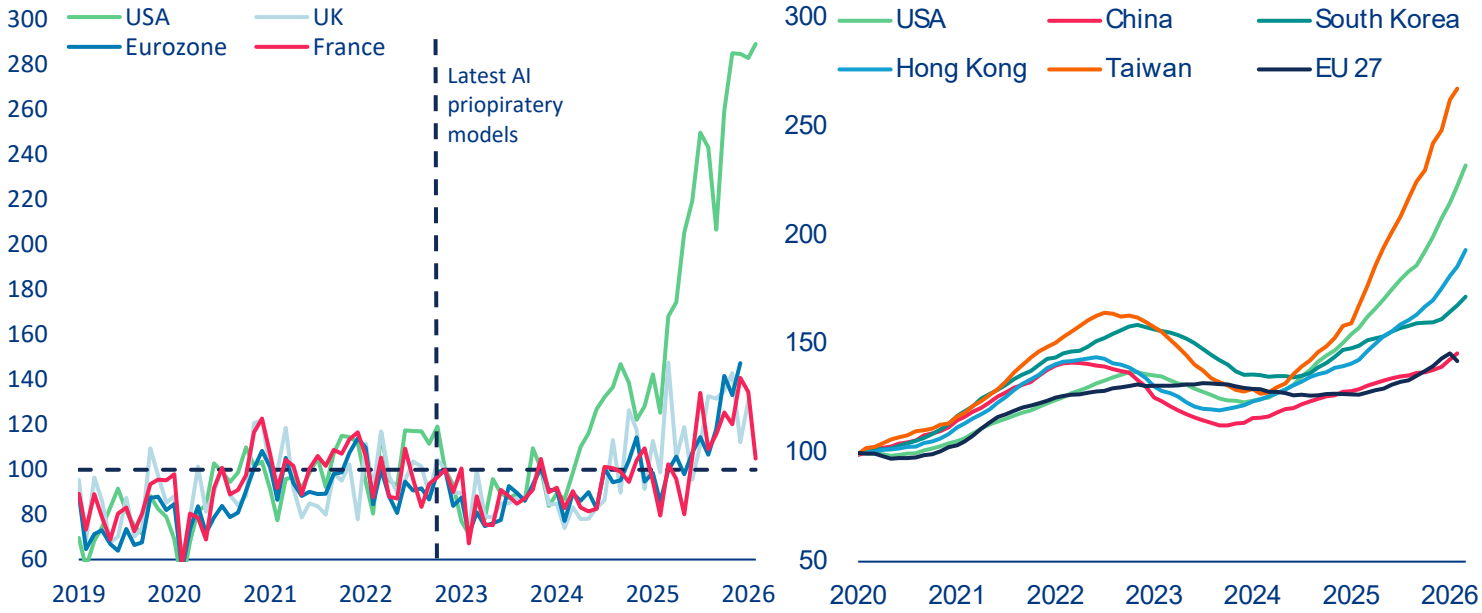
**Figure 4:** Share of AI-related goods (% of countries' total exports)



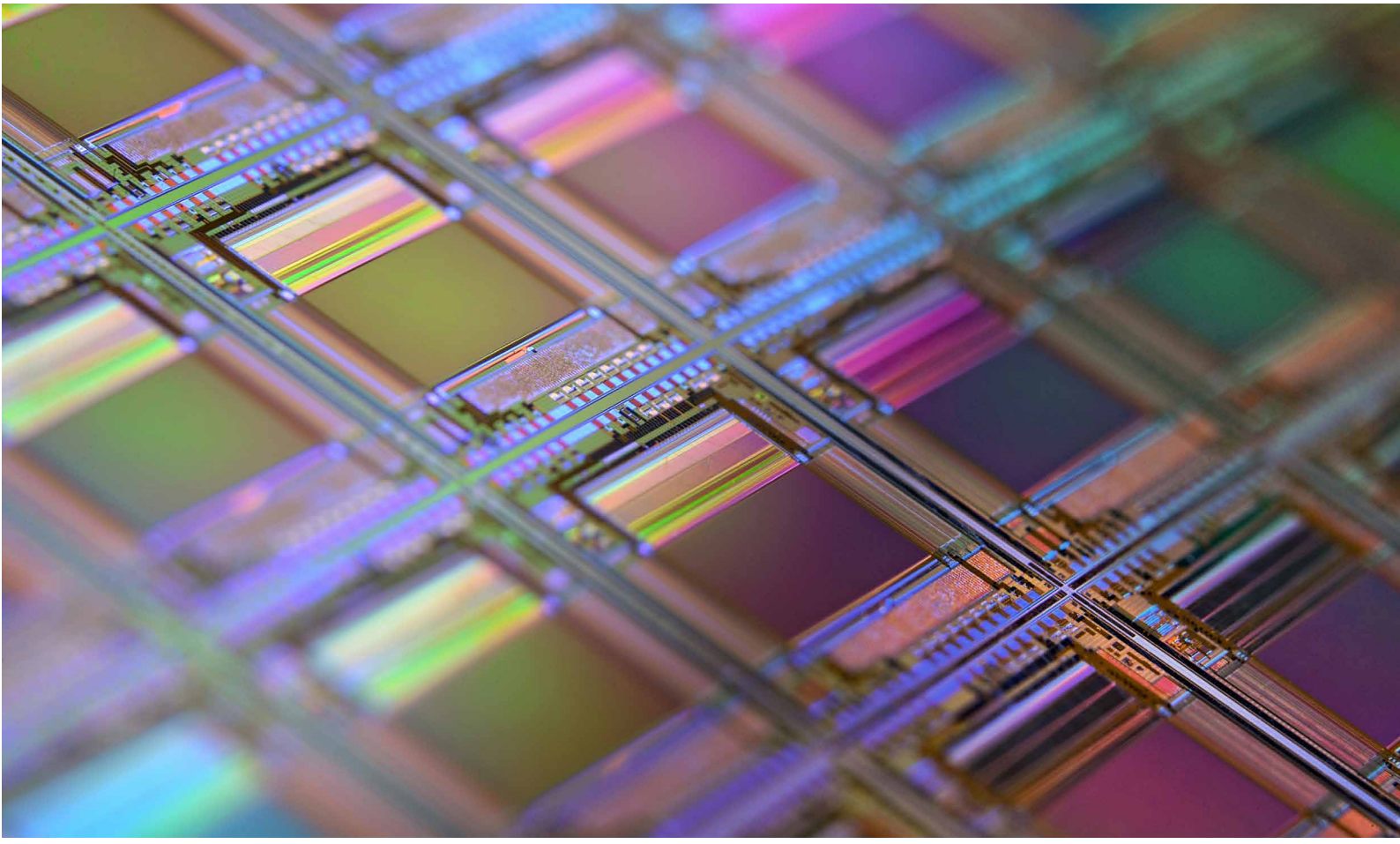

Sources: UN Comtrade, National Customs, Allianz Research

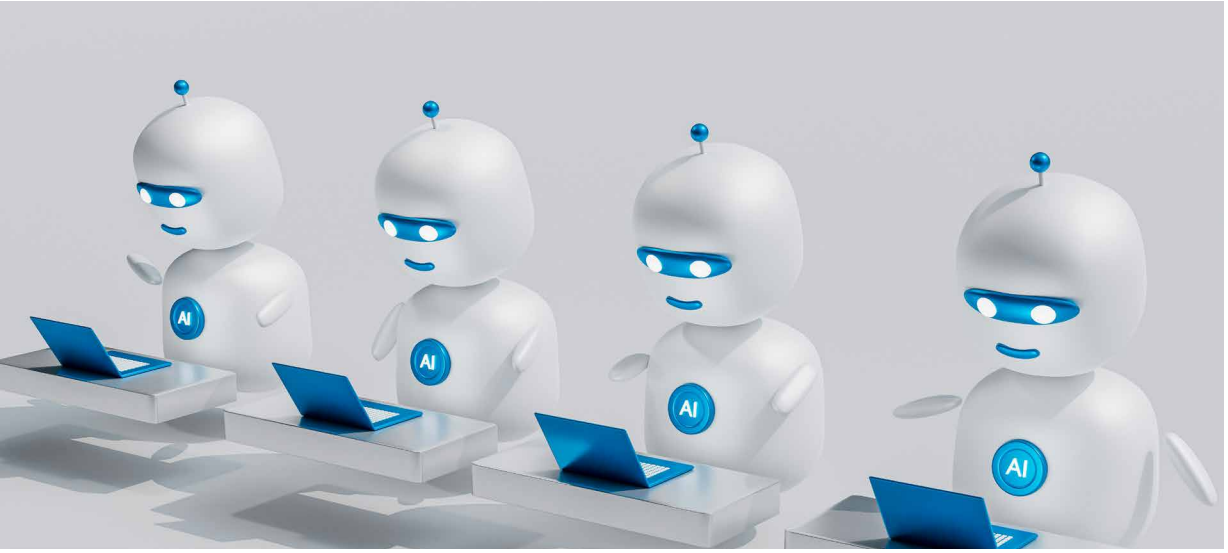
**However, AI-related import demand is highly concentrated in US and partially Asia.** Since 2023, Taiwan and the US have recorded the largest increases in AI-related imports, reflecting their pivotal positions in the AI supply chain: Taiwan through the import of capital equipment for semiconductor manufacturing and the US through demand linked to its dominance in AI services and data-center infrastructure. Since the mass-market deployment of large language models since 2023, the US has tripled its imports of advanced AI-related products (Figure 5, left), reflecting massive domestic investment in AI and continued reliance on foreign semiconductor supply. This surge has been reinforced by the rapid expansion of US data-center infrastructure, with 5,427 facilities accounting for 45% of global capacity in 2025 and 10 times the count of any other country. By comparison, Europe's AI-related imports have grown by only around 40% since 2023 (Figure 5, right), reflecting weaker investment in AI infrastructure, limited data-center capacity (Germany 2nd with 529, UK 3rd with 523, France 6th with 322 data-centers) and restricted access to advanced chips compared to US hyperscalers. Growth slowed further in early 2026. In Asia, beyond Taiwan, the strongest import growth has been seen in South Korea, reflecting its dual role in semiconductor production and consumers of advanced AI components, and Hong Kong, highlighting its important roles in semiconductor production and technology flows into China due to US export controls. Overall, the AI semiconductor market remains highly concentrated geographically: the US being the dominant end market for the most advanced generation of AI semiconductors, the EU and China as the other two large but structurally distinct demand pools. This creates significant exposure to shifts in demand, trade policy and regulation across a small number of economies: for AI hardware manufacturers any deterioration in US demand, tightening of trade and tariff policy, or regulatory disruption in Europe or China would have outsized consequences for the suppliers currently running at capacity to serve them.

**Figure 5:** US imports growth from selected AI products have skyrocketed, index (left) and Imports of overall AI-related products, in USDbn (right)




Sources: Trade Map, Allianz Research





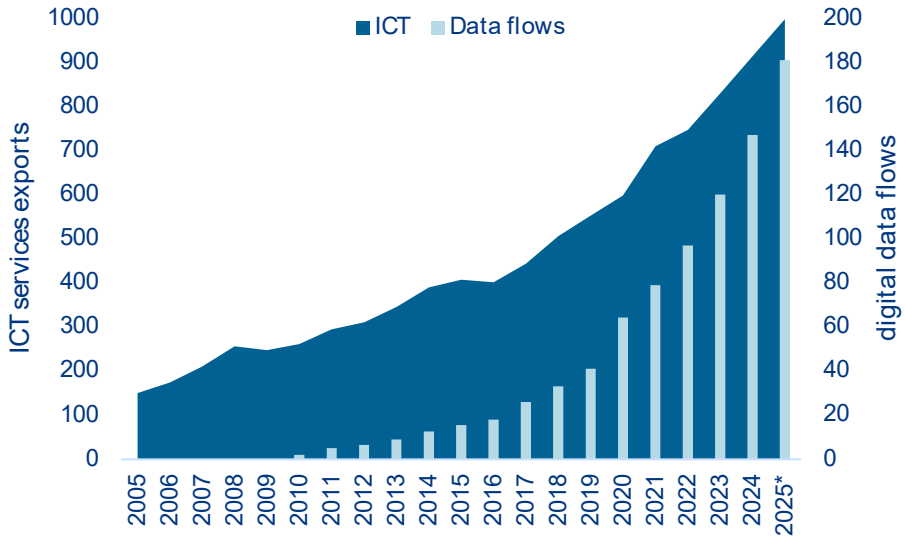

# The growth in trade in services and data flows is accelerating with the diffusion of AI

**Data flows and AI-related services trade are the backbone of transforming economic models into the future.** It differs structurally from the trade of goods in several key respects. Firstly, it is deeply integrated into broader digital and intra-firm flows, with much of its value being captured through cloud services, software licensing, data infrastructure and model access, which are frequently bundled together rather than being traded as individual services. This helps to explain the outsized role of hubs such as Ireland, which function less as traditional exporters and more as invoicing and coordination centers for global technology firms, particularly US multinationals. Consequently, bilateral imbalances, such as those between the EU excluding Ireland ("EU26") and Ireland, understate the true extent of dependence on US-based AI ecosystems. Indeed, the EU26 entity runs a large ICT services trade deficit of USD45bn, mostly explained by the deficit with Ireland, at close to USD55bn. India and the UK are far behind in terms of ICT exports to the EU and the US comes fourth, exporting less USD5bn directly to the EU26. Secondly, AI services act as the operating system for the trade of AI goods: advanced chips, servers and hardware only generate value when combined with cross-border flows of computing power, software and continuous model updates. This makes services a prerequisite rather than an adjunct to the trade of goods. Thirdly, the high concentration of trade reflects platform-based business models rather than pure comparative advantage, with a small number of economies capturing disproportionate value through intellectual property, data and digital infrastructure. Finally, the trade of AI services is increasingly shaped by regulatory and data governance regimes, which influence where services are hosted, billed and exported from. This reinforces fragmentation across jurisdictions. Together, these features imply that not only is AI-related services trade concentrated, it is also foundational, determining how value is distributed across the global AI economy.

**An essential for the development and distribution of AI-systems are cross-border data flows.** As AI systems rely on large, diverse and continuously updated datasets that only generate value when combined with software, hardware and expertise, the flow of these data internationally is essential for AI development and adoption. As data is non-rivalrous, it can be reused by multiple users and applications, creating strong

economies of scale and scope. Free data flows enable firms to combine information across markets, build more accurate and generalizable models and accelerate innovation. By contrast, restrictions limit scale, raise costs, reduce interoperability and slow diffusion. The growing importance of this issue is reflected in broader trends: data-driven services such as computing, telecommunications and finance now account for almost half of the global trade in services. ICT services have evolved rapidly over time making up 0.53% of nominal global GDP in 2015 and have increased by 56% to 0.85% in 2025, while cross-border data volumes have grown more than tenfold from 15.5 zettabytes in 2015 to 181 zettabytes in 2025 (Figure 6). Together, these dynamics demonstrate that seamless cross-border data flows are a key driver of AI performance and innovation, as well as being a fundamental pillar of the global digital economy and the rise in AI-related services. And although data is generated and flows globally, it is often processed, stored and monetized in a small number of digital hubs with advanced infrastructure, which concentrates value geographically.

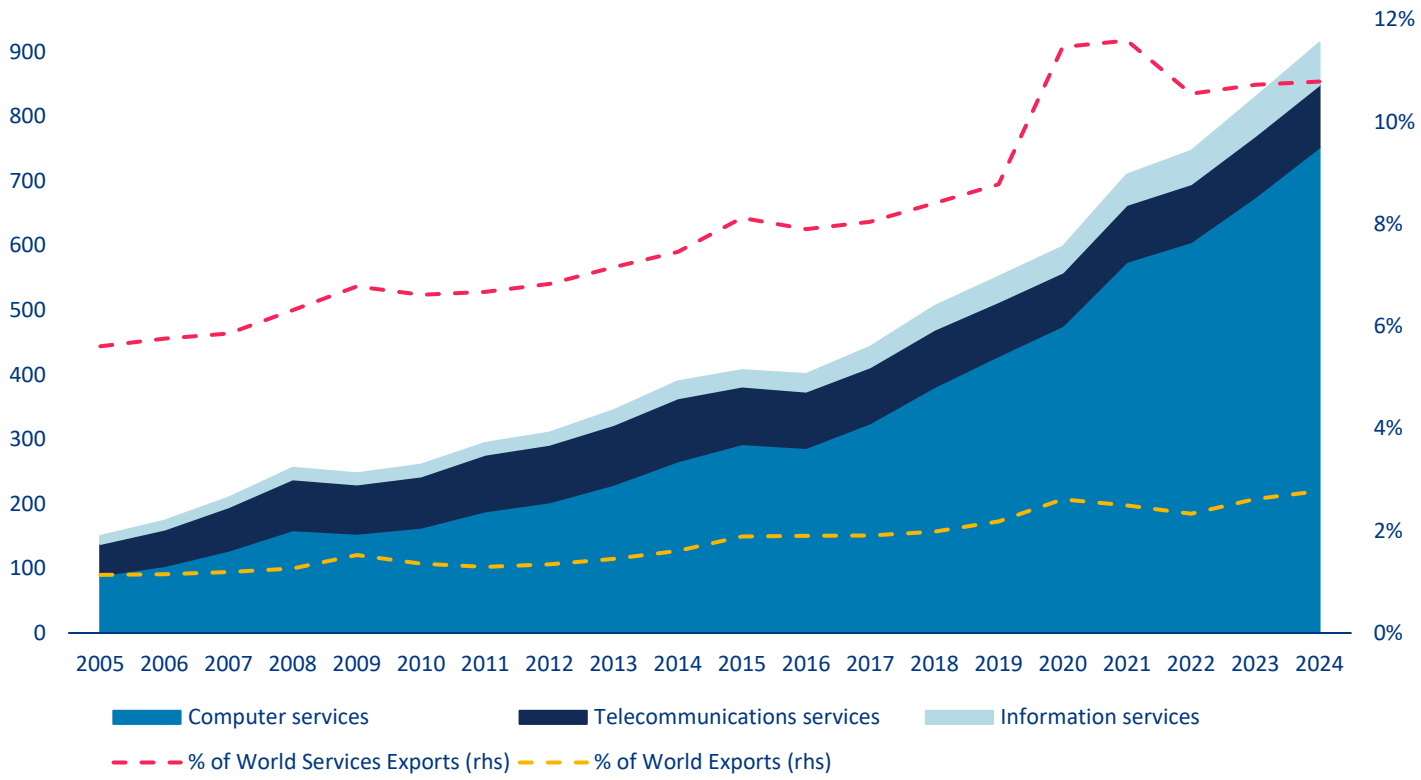
**Figure 6:** Cross-border global trade in ICT services (in USDbn) and digital data flows (in zettabytes)




Sources: OECD BATIS, Statista, Allianz Research. Notes: 2025* is an interpolated approximation for ICT services as no data is yet available.

**The value of international trade in ICT services is approaching USD1trn, growing more rapidly than overall services (11% of global services trade, up from 8% a decade ago).** This growth has been driven by rapid expansion since 2016–17, with the sector being highly concentrated in a few hubs. The sector, which is dominated by computer services such as software, consulting, infrastructure and support, reached approximately USD900bn in 2024 (around 3% of the total value of goods and services traded globally, and 11% of the value of services) (Figure 7). Ireland stands out as a key hub for US tech multinationals providing digital services to European core markets. It exported ICT services worth USD173bn in 2024, accounting for an exceptionally high 60% of its total exports. This is largely due to intra-firm flows linked to datacenters and licensing revenues. Consequently, Ireland has become the world's largest ICT services exporter, surpassing the EU (excluding Ireland) with USD142bn and the US with USD108bn of ICT exports to the rest of the world, respectively. Within the EU (for which we count both extra and intra-EU trade), major ICT exporters include Germany, the Netherlands and France. Meanwhile, India remains a major player, while China lags behind in providing digital services to the world.

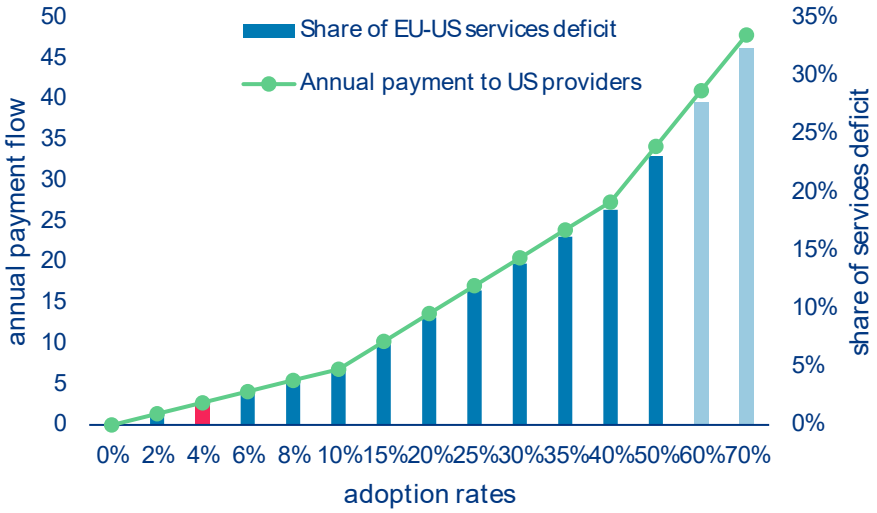
**Figure 7:** AI-related ICT services trade breakdown (in USD bn)




Sources: OECD, WTO, Allianz Research

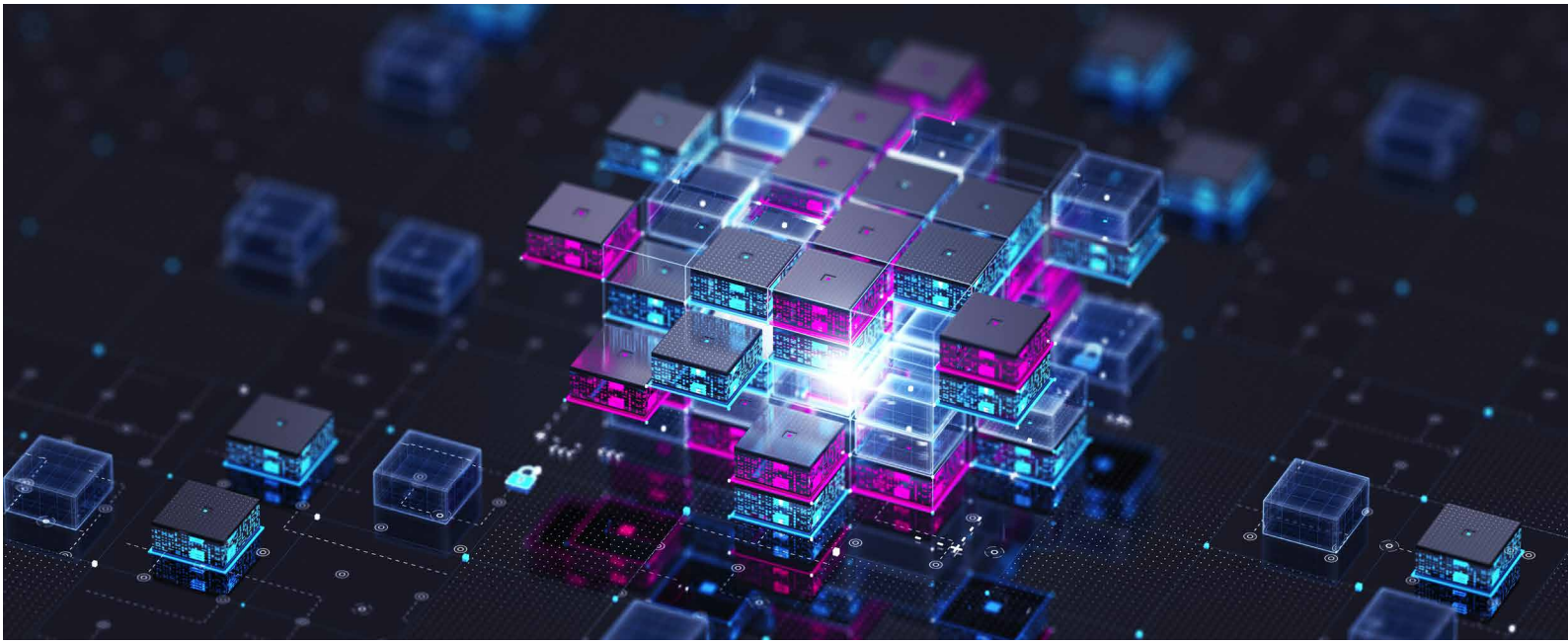
**AI diffusion will be the next big driver in EU-US services imbalances due to EU dependence on AI model provision.** Adopting AI in the Eurozone could significantly increase the transatlantic services imbalance through recurring subscription payments to US AI providers. Assuming an adult population of around 285mn in the Eurozone and a Claude Pro or ChatGPT Plus-style price of EUR20 per month (EUR240 per year, the current standard pricing for individual users), even modest adoption would result in significant cross-border services imports. With an estimated current penetration rate of around 4%, this equates to approximately EUR2.7bn per year in payments to US providers; already a significant portion of digital services imports, albeit still modest compared to the EUR148bn EU–US services deficit in 2024. Increasing adoption to a 10% penetration rate would raise outflows to approximately EUR6.8bn, and to around EUR17.1bn at a 25% penetration rate (Figure 8). At this point, AI subscriptions alone would be comparable to a tenth of the entire current services deficit. Under a high-adoption scenario in which 50% of adults subscribe, annual payments would total approximately EUR34bn, implying an additional impact of over one-fifth of the current EU–US services deficit, representing a significant increase in US services exports driven purely by AI diffusion.

**Figure 8:** Back-of-the-envelope calculation of annual payment flow from the EU to the US (in EURbn) and share of EU-US services trade deficit (in %) along AI penetration rates in the adult population




Source: Allianz Research. Notes : Assumes an adult European population of 285mn along hypothetical AI adoption rates, a subscription fee of EUR20/month (current standard pricing of ChatGPT Plus or Claude Pro for individual users) and a EU-US services trade deficit of EUR148bn.

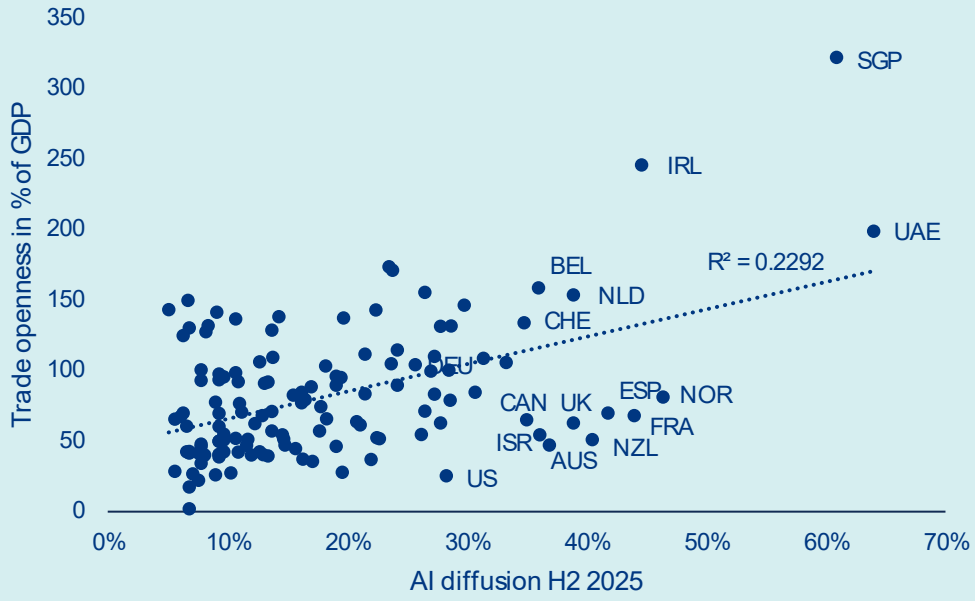
**More broadly, AI acts as a scalable, recurring channel for importing services to the US economy via software subscriptions, cloud computing, APIs, IP licensing and digital advertising.** These flows are intangible, highly scalable and concentrated in US hyperscalers. This matters because the EU's apparent digital surplus is already distorted by profit shifting and US tech revenues booked via Ireland. Stripping this out suggests a structural digital services deficit exceeding EUR100bn. AI accelerates this dynamic further as, unlike infrastructure-heavy digital services, subscriptions represent near-pure cross-border revenue transfers with limited domestic value creation. Furthermore, the impact is likely underestimated in the simple subscription model: enterprise AI usage (APIs, Copilot integrations and SaaS embedding) already exceeds consumer subscriptions, and productivity effects could also reduce Europe's own services exports. Therefore, unless offset by strong domestic AI platforms, European digital champions or localization of AI infrastructure and billing, AI diffusion risks becoming a persistent structural driver of widening EU–US services imbalances.



# Box: Europe struggles with strategic dependencies

**Despite its openness to trade, Europe faces uneven AI adoption, restricting its ability to compete with leading rivals.** Trade openness explains 23% of the variation in AI diffusion across countries (Figure 9), with highly open economies such as Singapore, the United Arab Emirates and Ireland also recording the highest diffusion rates. But Europe contradicts this trend. Though its economies are highly open and integrated into global value chains, AI adoption remains uneven due to strict data privacy and regulation, limiting the continent's ability to benefit from AI-driven productivity gains. Overall, while AI can significantly boost productivity and growth, its benefits are unlikely to be evenly distributed, potentially increasing inequality between capital and labour, high- and low-skill workers, and larger versus smaller firms.

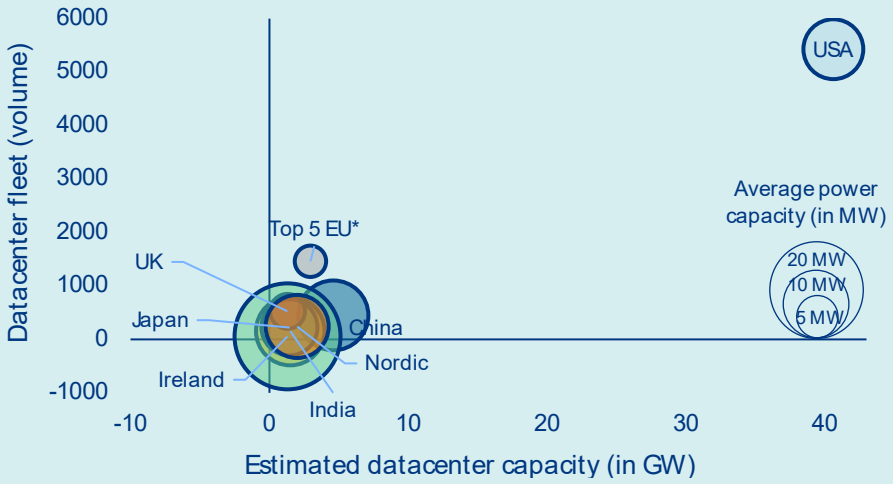
**Figure 9:** Brade openness (total trade as % of GDP) versus AI diffusion in H2 2025 (in %)




Sources: World Bank, Microsoft, Allianz Research

**When it comes to data centers, the US is racing far ahead.** With an estimated 40+ GW of installed capacity today (Figure 10), projected to surpass 100 GW by 2030, the US already has the world's largest computing infrastructure. This is underpinned by over USD600bn in capital expenditure committed by US hyperscalers alone this year. By contrast, Europe remains structurally underequipped. Its data-center capacity is heavily concentrated in five core markets (FLAP-D: Frankfurt, London, Amsterdam, Paris and Dublin), accounting for around 60% of the total European capacity. Meanwhile, emerging hubs such as the Nordic countries are only just beginning to attract significant interest, thanks to competitive energy costs and an increasing proportion of renewable energy sources. The challenge for Europe is not merely one of scale, but also of capital and political architecture. Unlike the US, where private hyperscalers flood the market with investment, or China, where the state substitutes for private capital, Europe suffers from a dual deficit: insufficient private investment and an absence of coordinated public policy. The fragmentation of Europe's regulatory landscape prevents the emergence of a clear, common framework dedicated to AI infrastructure, leaving European ambitions dangerously reliant on external resources.

**Figure 10:** Data-center fleet & estimated capacity (in GW) per region

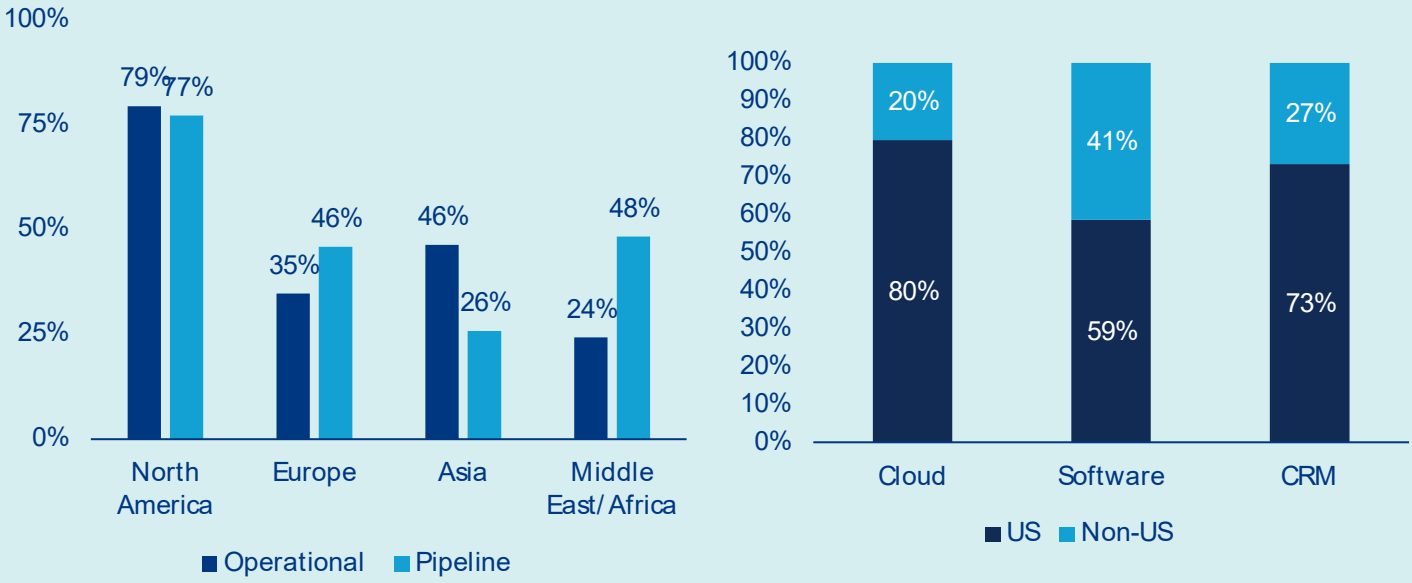



Sources: Cloudscene, Cushman & Wakefield (Datacenter H2 2025 update), Allianz Research. Notes: *Country group including Germany, France, Italy, Spain & Netherlands.

**To avoid falling into a technology dependency trap, regulatory and capital constraints need to be cleared.** Building data-center infrastructure in Europe is a formidable undertaking, constrained by a unique combination of structural, regulatory and financial hurdles that are unparalleled in the US or China. Limited land availability in urban areas, lengthy and complex permitting processes and increasingly stringent environmental regulations – particularly regarding water consumption and carbon footprint – can extend development timelines significantly, often stretching from planning to commissioning to over four years. Perhaps the most acute bottleneck is power connectivity: grid connection queues in key European markets have grown dramatically, with some operators reporting wait times of five years or more for adequate power access. This is a direct consequence of ageing grid infrastructure and competing demand from industrial and residential users. Financing conditions add another layer of complexity, as the capital-intensive and long-term nature of data-center projects does not align with the risk appetite of many European institutional investors. This is due to the absence of the deep and liquid private credit markets that underpin US hyperscaler investment.

**The consequences of this investment gap are already evident in the ownership structure of infrastructure.** As of 2025, US hyperscalers accounted for roughly 40% of total data-center operational capacity across Europe, but almost half of the pipeline (Figure 11, left) as large US tech firms are taking profits from weak private capital market in Europe and low competition from local players to consolidate their presence within a key market for them. The digital services layer tells an even starker story: US firms currently capture 80% of European cloud revenue, 59% of enterprise software revenue and 73% of CRM expenditure, leaving non-US players, including European vendors, to compete for the remaining margins Figure 11, right). This dominance is no accident. US hyperscalers' substantial financial resources enable them to absorb permitting delays, pre-fund grid upgrades and negotiate directly with national governments on energy and land access, structural advantages that no European operator can currently match on an equivalent scale. Their ample cash reserves effectively enable them to fill the void left by the lack of traction in private and public investment on the continent, as they steadily expand their physical and commercial footprint with each passing planning cycle.

**Figure 11:** Weight of US hyperscalers in datacenter capacity (current & future) across the globe (left) and market share of IT services and software applications revenue in Europe per firm nationality (right)




Sources: CBRE, Synergy Research, European Software & Cyber dependencies report (European Commission, Dec. 2025), Allianz Research. Notes: Data as of Q4 2025.

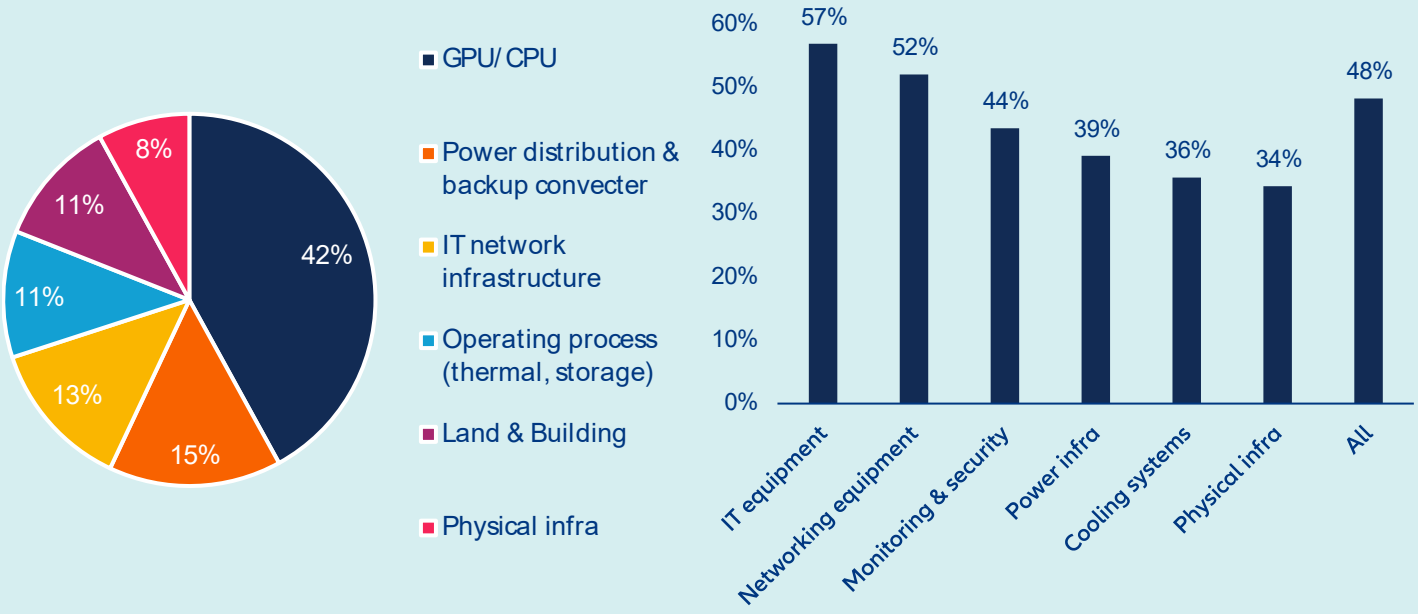
**Initiatives such as Mistral AI and sovereign computing capacity projects in France and Sweden are promising, albeit modest, counterweights.** Without decisive, coordinated action from Europe, including the mobilization of sovereign funds and development banks, as well as the establishment of a harmonized permitting framework, the continent risks becoming dependent on foreign infrastructure providers, losing not just market share, but also strategic autonomy over the digital backbone of its economy.

**Strong industrial-linked specialization and regulatory constraints undermine European ambitions to build up a domestic semiconductor ecosystem and take part to AI race.** Historically, European industrial strategy oriented domestic semiconductor production toward application-specific and industrial-grade chips, well suited to its automotive and manufacturing base but leaving the continent without meaningful capacity in the advanced nodes where AI demand is now concentrated. In the meantime, the relatively small weight of the ICT industry in Europe (less of 1% of GVA) but also the absence of a large domestic hyperscaler with ample cash reserves like in the US meant there was never sufficient demand to justify leading-edge foundry investment at scale, a gap that policy has failed to compensate for. Regulatory complexity and slow subsidy disbursement have further deterred the large infrastructure commitments that catching up would require. The cancellation last year of Intel's plan to build a foundry in Magdeburg is a good example Underlying both is a structural weakness in private capital markets: With only 6% of global AI funding flowing to European firms, the continent lacks.

**Finally, Europe's data-center ambitions depend on fragile, Asia-heavy supply chains.** Building AI-dedicated data-centers is, first and foremost, a hardware problem, and Europe currently owns very little of it. GPUs and CPUs alone account for around 42% of the total capital cost of a 1GW AI data center (Figure 12, left), and this expenditure largely flows outside of Europe: non-EU import ratios exceed 57% for IT equipment and 52% for networking gear (Figure 12, right). Five Asian economies (Taiwan, China, South Korea, Malaysia and Vietnam) collectively supply around two-thirds of this expenditure. Taiwan's near-monopoly on sub-3nm logic chips and South Korea's dominance in memory represent structural dependencies, not cyclical ones, and cannot be meaningfully substituted in the short term. The next tier of components – power distribution, IT network infrastructure and cooling systems, each representing 10–15%

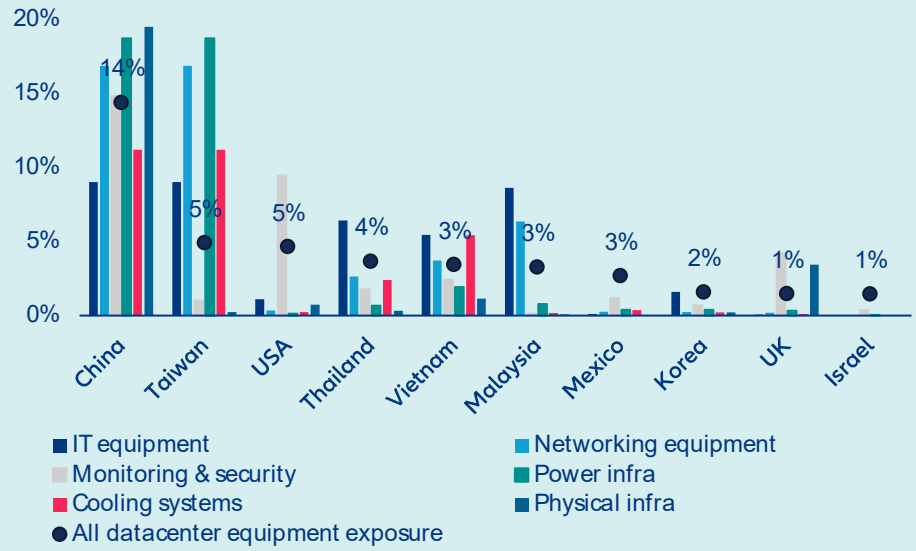
of datacenter value – shows only modestly better numbers: monitoring and security sits at 44% non-EU exposure, power infrastructure at 39%, and cooling systems at 36%. Even physical infrastructure, the least technology-intensive segment, runs at 34% external reliance. At the country level, China stands out with a total exposure share of 14% across all datacenter equipment categories (Figure 13), nearly three times the weight of both the US and Taiwan, reflecting its dominance in advanced electronics and physical and cooling inputs. Vietnam primarily supplies computers and electronic transmission devices, while Turkey is a notable partner for cooling systems. Despite its influence on the software and services stack through its hyperscalers, the US has a more modest hardware footprint concentrated in IT and networking. Overall, Europe has little domestic manufacturing depth in advanced electronics and limited battery and power storage capacity. Its supply chain is also acutely exposed to two live geopolitical risks: renewed trade tensions between Washington and Beijing (currently on pause but far from resolved) and any energy disruption in Asia stemming from Middle East instability. For a continent with sovereign AI ambitions, this is a precarious foundation.

**Figure 12:** Estimated cost breakdown of an AI-dedicated 1GW capacity data center* (left) and share of non-EU imports ratio for critical materials used in AI data-center infrastructure construction, 2025 (right)




Sources: Bernstein, Eurostat, Allianz Research.** GPU share based on Nvidia GB200 cost.

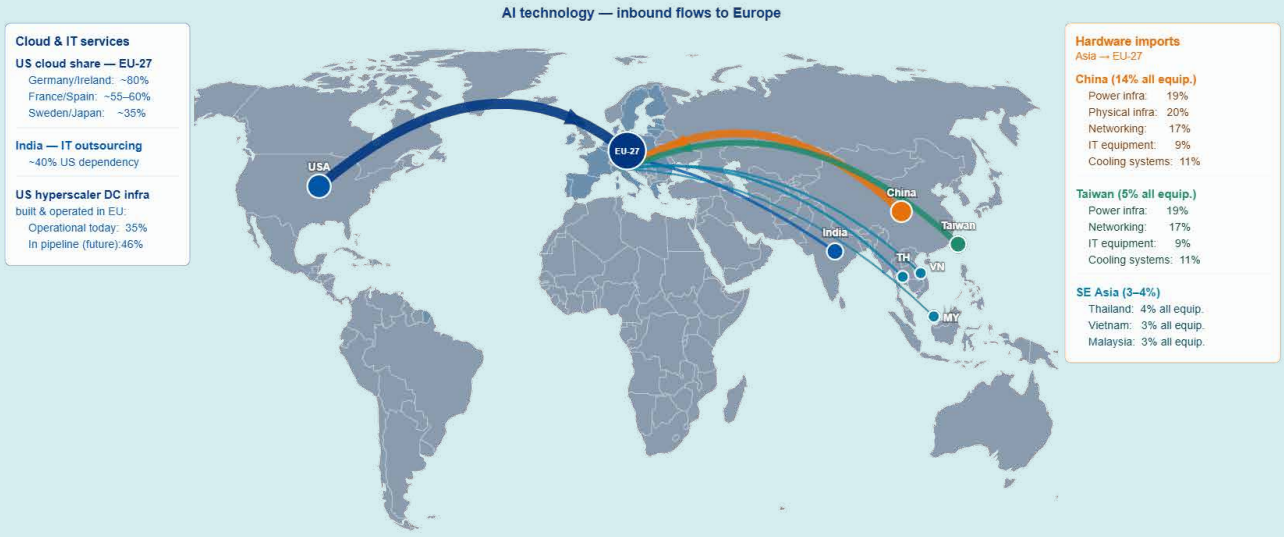
**Figure 13:** Top 10 non-EU suppliers of critical materials for AI data-center infrastructure construction




Sources: Eurostat, Allianz Research

**This structural dependency has direct macroeconomic consequences.** Europe's limited control over AI infrastructure and its reliance on imported hardware and foreign hyperscalers imply that a growing share of AI-related value added will be captured abroad, dampening domestic productivity multipliers and GDP gains from AI adoption. At the same time, higher data-center build costs, prolonged permitting cycles and constrained grid access raise the effective cost of AI deployment in Europe, slowing diffusion into the broader economy. This combination risks a dual drag: weaker productivity growth relative to the US and higher unit costs for digital and industrial transformation. Over time, it could also widen the transatlantic gap in investment intensity, reinforce Europe's structural current account outflows in digital services and increase vulnerability to external price-setting in critical digital inputs.

**Figure 14:** Top 10 non-EU suppliers of critical materials for AI data-center infrastructure construction

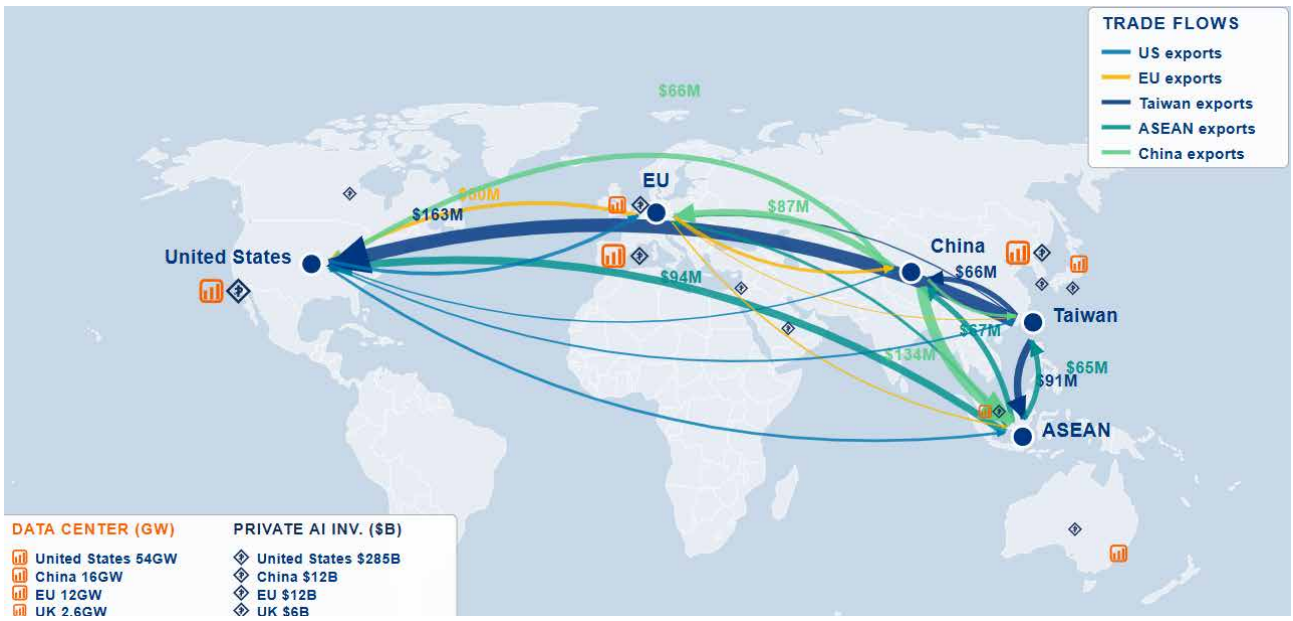



Sources: Allianz Research

# The world is flat: AI reconfigures the geography of trade and dependencies

**The AI supply chain is becoming more geographically distributed in assembly and packaging, but more concentrated and fragile at the technological frontier, with diversification creating the appearance of resilience while reinforcing dependency on a small number of critical nodes.** The most critical parts of the AI supply chain (advanced chips, high-bandwidth memory, and the equipment to produce them) remain highly concentrated in a small set of countries, especially Taiwan, South Korea, and the Netherlands, and this concentration has intensified since 2022 due to export controls and the AI buildout. This creates systemic single points of potential failure in the global AI system. Partial diversification took place only in the middle layers of the supply chain. Server assembly, packaging and networking are shifting geographically under the influence of US policy and export controls, with gains for Vietnam, Mexico, Japan, Taiwan and parts of Eastern Europe. But this friendshoring is still limited in scale and far from replacing established hubs.

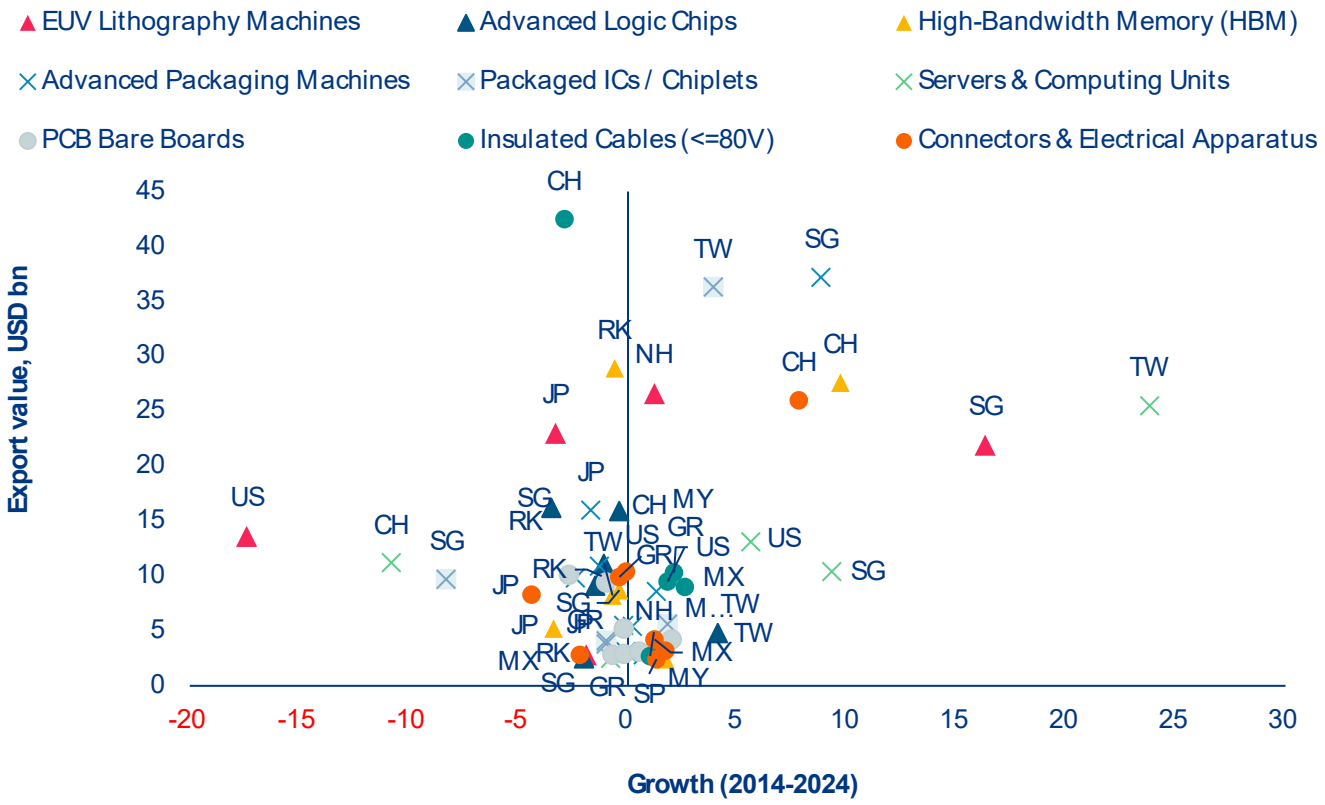
**Figure 15:** AI supply chain concentrated in several key geographies




Sources: Stanford HAI 2026, Synergy Research, Trade Map, Allianz Research

**Despite friendshoring efforts, diversification away from China remains limited.** A decade of diversification investment has produced incremental shifts in specific sub-segments but no geography has emerged as a credible large-scale alternative. Vietnam and Mexico have attracted investment and attention as potential alternative bases for electronics assembly, and there are signs of incremental share gains in specific sub-segments, but the scale of Chinese capacity in these categories means that meaningful diversification remains a multi-year undertaking for most supply chains. China continues to dominate low-value, high-volume components that are essential but underappreciated (Figure 16). Diversification away from China in these segments is slow, meaning supply chains remain exposed to geopolitical shocks despite rhetoric of decoupling. The risk here is overexposure to Chinese production in case of a new geopolitical shock or policy change in Bejing.

**Figure 16:** Concentration towards Asia in the higher value added parts of the AI supply chain, while China further integrates low-value, high-volume




Sources: UNComtrade, Allianz Research. Note: Shapes of the markers correspond to different sections of AI-supply chain: triangle = higher value, cross = middle value, circle = lower value.

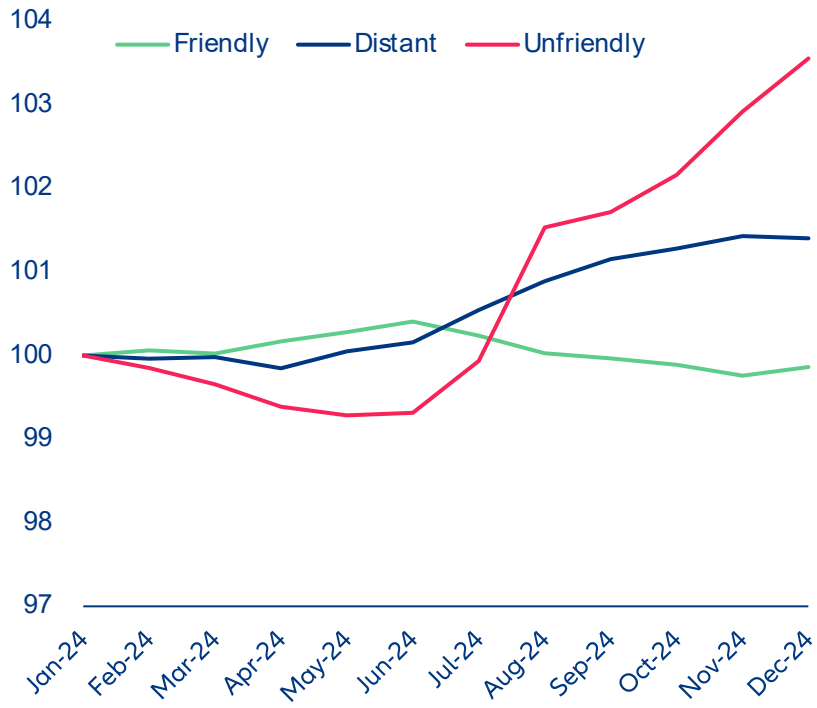
**Hidden upstream vulnerabilities emerge with the current conflict in the Middle East**. Shortages of key inputs for semiconductor production, notably helium, would impact the most leading-edge fabs, which could translate to losses above USD10bn a month. Qatar accounts for a third of global production of helium, an upstream input of the AI supply chain that is also almost entirely shipped through Gulf terminals. While the inflationary cost impact is relatively small on semiconductor production compared to the rest of the supply chain, the production shortage would be much more impactful, with an asymmetric impact. Semiconductor producers in South Korea are most at risk, given their exposure of imports from Qatar, and early estimates suggest 4 to 6 months of reserves. However, everything hinges on gas storage in non-producing countries. The US holds the largest known reserves and has historically been the dominant producer, but its federal helium reserve has been progressively wound down under legislation mandating its disposal. Japan, one of the world's largest helium consumers given its electronics and semiconductor manufacturing base, holds no domestic reserves and is almost entirely import-dependent. New countries could increasingly offer their helium reserves to the market, including Russia, Australia and Algeria, as well as Tanzania, which holds what may be one of the world's largest undeveloped helium deposits in the Rift Valley, though it remains years away from commercial production.

**US trade policy has reinforced rather than fundamentally reshaped semiconductor supply chains.** China now accounts for just 0.7% of US semiconductor imports in tariffed categories, subject to a 25% tariff, while production (or rerouting) shifted toward Taiwan, Vietnam, Malaysia, Thailand and Mexico. Despite headline tariff threats of up to 46% on Vietnam and 36% on Thailand, semiconductors remain largely exempt from new trade measures, with

effective tariff rates near zero for most major suppliers and around 1% for Malaysia. As a result, the post-2018 semiconductor supply chain continues to operate under near free-trade conditions. The more ambitious reshoring effort has been the CHIPS Act which redirected USD52bn toward domestic manufacturing and research. Its investment allocation has been substantial, but the production results remain limited and represent only a small fraction of Taiwan's output.

**Geopolitics is changing where semiconductors are manufactured rather than with whom they are traded.** The commercial logic of the supply chain remains largely intact: Taiwan, South Korea and the broader Southeast Asian production ecosystem continue to sell to every major economy without any need of political alignment. This creates a form of structural interdependence that cuts across geopolitical blocs in ways that policy narratives tend to obscure: China remains deeply integrated into the commercial semiconductor market for everything below the frontier of advanced logic and memory, and continues to source the vast majority of its chip requirements from the same Taiwanese and Korean suppliers that serve US hyperscalers. The meaningful exceptions are narrow but strategically significant, US export controls have effectively excluded China from sub-7 nanometre logic, high-bandwidth memory for AI applications, and the lithography equipment required to produce either domestically, creating a two-tier market in which the frontier is controlled and the mainstream is not. This commercial logic is increasingly visible in the trade data. For most goods, trade has fragmented along political lines, rising between geopolitically „friendly" countries and declining between „unfriendly" ones, and until recently AI-related goods followed the same pattern. Since 2024, however, this trend has inflected, with trade in AI-related goods between „unfriendly" countries stabilising and subsequently rising, even as broad goods trade between the same countries has continued to fragment (Figure 17). This divergence suggests that, outside the narrow frontier segment subject to export controls, commercial interdependence in the AI supply chain is proving more resilient than political alignment.

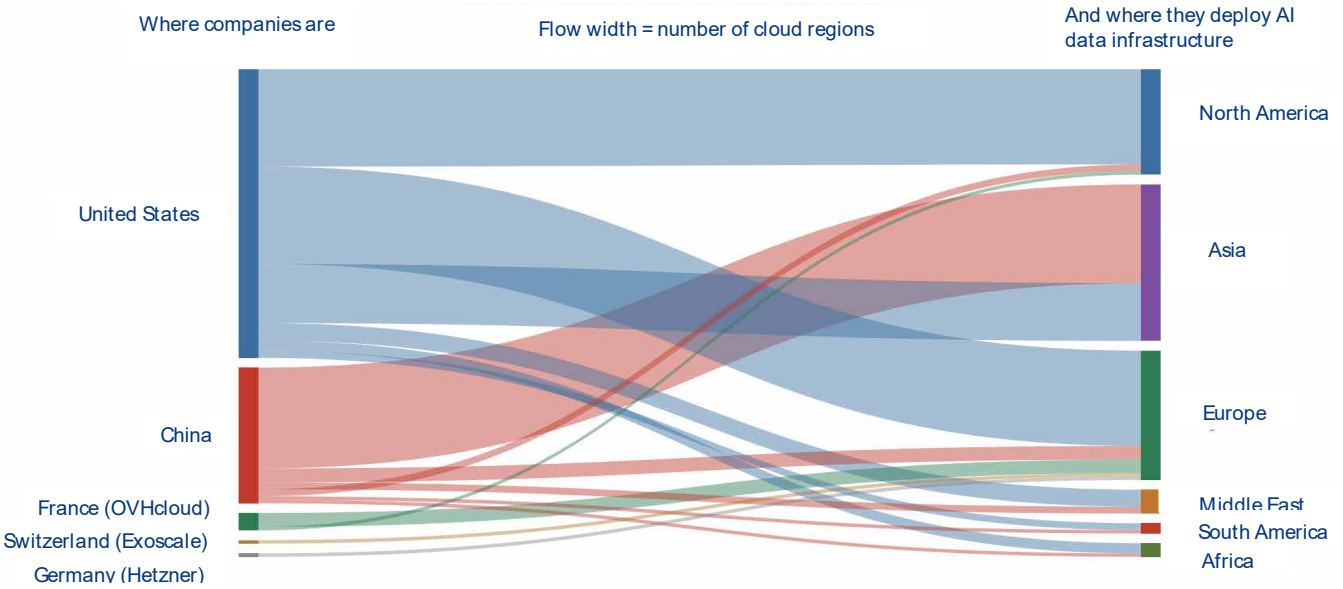
**Figure 17:** Growth of AI-related goods between unfriendly countries experiences the largest increase during 2024



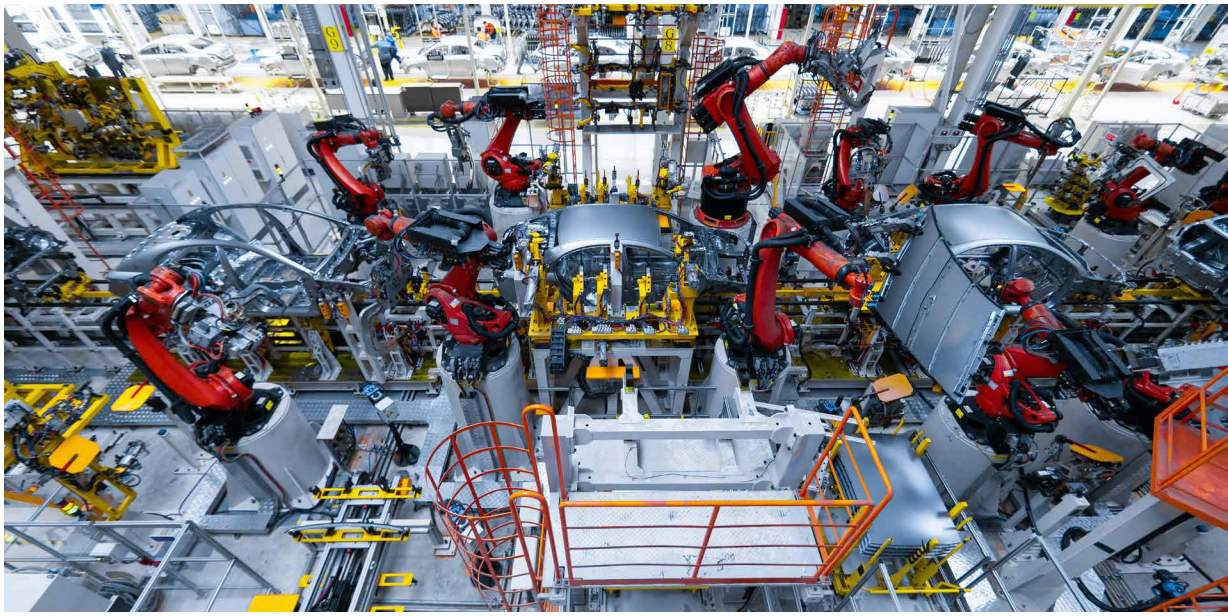

Sources: UN Comtrade, Allianz Research

**AI-related production and infrastructure provision will remain concentrated.** Geopolitics is reshaping semiconductor investment globally, but despite massive subsidy programs across the US, Europe, China, Japan and India, the likely outcome is not full supply security but a more geographically distributed industry that remains highly dependent on a small number of leading-edge producers for the most critical AI and defense technologies. The geographic concentration of large-scale AI-capable data centers is becoming a new source of geopolitical power, as control over compute infrastructure increasingly determines which economies can develop, export and benefit from AI services. The US dominates the global AI infrastructure landscape in the Western hemisphere, while China dominates Asia (Figure 18). Large parts of Africa and Latin America remain largely excluded from the compute capacity and so far depend half-half on the US and China with no dominance decided yet. This growing concentration risks reinforcing technological dependence, widening digital divides and shifting economic and strategic influence toward the countries that control cloud infrastructure, data flows and AI platforms.

**Figure 18:** Distribution of headquarters of AI companies and AI data infrastructure deployment




Sources: WTO (2025), Lehdonvirta, Wu and Hawkins (2024), Allianz Research



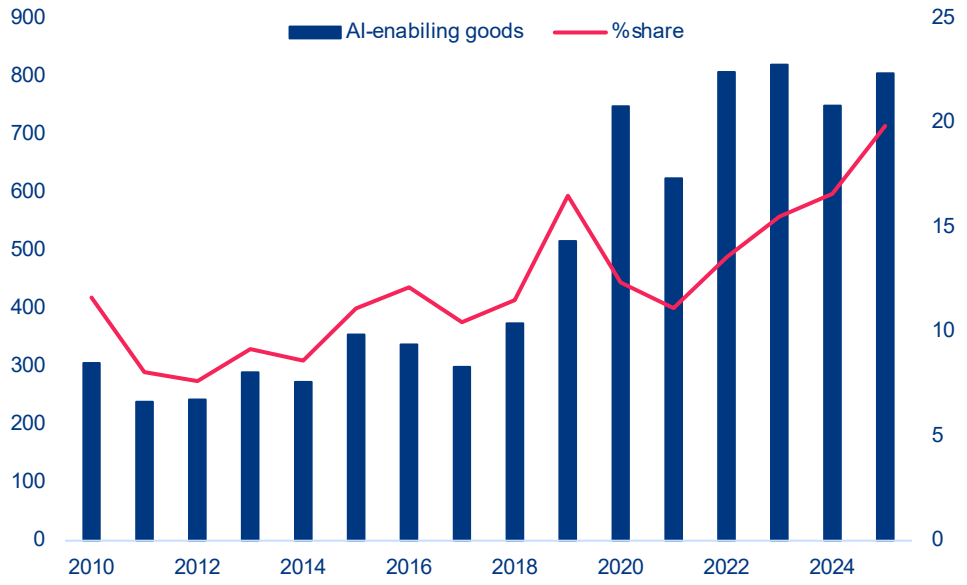
# The race for AI dominance is increasingly also being fought through industrial policy

**Tariffs on AI-enabling products remain low.** Industrial policy and trade rules are becoming central to competition in the field of AI, influencing access to critical minerals, semiconductors, cloud infrastructure, IT services and cross-border data flows, all of which are essential for the development and deployment of AI. Open and predictable trade regimes support innovation, productivity and the integration of AI into global value chains. However, these tools are increasingly being weaponized in an increasingly geopolitical world. Despite rising tensions, tariffs on AI-enabling products remain relatively low. Worldwide, most-favored-nation (MFN) applied tariffs on AI-related goods fell from 5.6% in 2015 to 2.8% in 2025, compared with 7.8% on manufacturing goods overall. The US maintains an average tariff of 1.4%, the EU of 2.0%, the UK of 1.3%, and EFTA countries effectively zero, while China applies the highest average tariff in the group at 3.5%. Overall, AI-related goods continue to be traded under relatively open conditions, reflecting the strong interdependence of global AI supply chains and the strategic importance of maintaining access to computing infrastructure, digital technologies and knowledge flows.

**Non-tariff measures (NTMs) on AI-enabling goods account for a fifth of all harmful NTMs in force.** Over the last decade, NTMs rose from 355 in 2015 to 805 in 2025 (Figure 19) with their share of the total constantly increasing since the deployment of AI to the general public in 2022. These measures, including export restrictions and financial assistance, increasingly reflect efforts to protect technological leadership and secure strategic industries. China has been the top player in implementing trade restrictions with a peak 2020, while the US has more recently picked up since 2022 overtaking China only in 2025. The US and China implemented the most restrictions in 2025 with 208 new restrictions from the US and 159 from China. At the same time, the US is the most affected nation as well, followed by Germany, Malaysia, Thailand, China, the Netherlands and Japan. While the most common new measure implemented in 2025 were import tariffs, this has shifted clearly from financial assistance in foreign markets which was top of the list since 2011 and peaked in 2020 with 431 new measures, followed by tariffs and trade finance and the occasional export

ban on AI-enabling goods. While such restrictions may slow technology diffusion in the short term, they also carry significant costs, are difficult to enforce and can accelerate innovation and diversification elsewhere, limiting their long-term effectiveness unless backed by strong domestic industrial capabilities and coordinated policy frameworks.

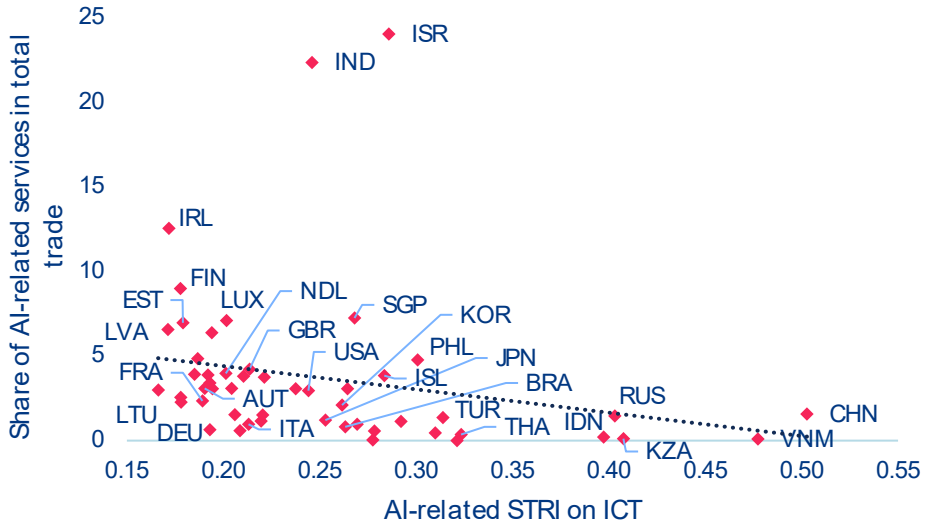
**Figure 19:** NTMs on AI-enabling goods, number of cumulative measures implemented (left) and percentage share (right)




Sources: GTA, Allianz Research

**Trade in AI-enabling services is limited by restrictive regulations.** The trade of AI-related services is increasingly being shaped by restrictions on digital services and cross-border data flows. These restrictions are becoming a key determinant of global AI market share. Although AI is making services such as finance, software and telecommunications more tradable, these sectors are still limited by foreign equity restrictions, licensing regulations, localization requirements and barriers to cross-border delivery. Economies with more restrictive ICT and digital trade regimes capture smaller shares of AI-enabled services exports. In fact, ICT trade restrictiveness explains around 5% of a country's share of AI-related services trade (Figure 20). There is significant regulatory fragmentation: the OECD Digital Services Trade Restrictiveness Index (STRI) records 78 economies requiring a local presence out of 129 countries covered and 46 imposing data localization rules in 2025. The number of countries requiring data to be processed or stored locally nearly doubled in the last decade. These barriers disproportionately affect AI-intensive sectors such as telecommunications, banking, insurance and software, where cross-border supply and commercial presence remain tightly regulated. Furthermore, fragmented data governance amplifies divergence by raising compliance costs, limiting access to cloud infrastructure and global datasets, and weakening participation in AI innovation networks, particularly for smaller economies. While some regulation is necessary for trust and security, openness to digital trade and data flows is now a key factor in achieving AI competitiveness. Economies with restrictive regimes are increasingly failing to capture AI-driven growth.

**Figure 20:** AI-related services share in total trade (in %) to AI-related services trade restrictiveness index

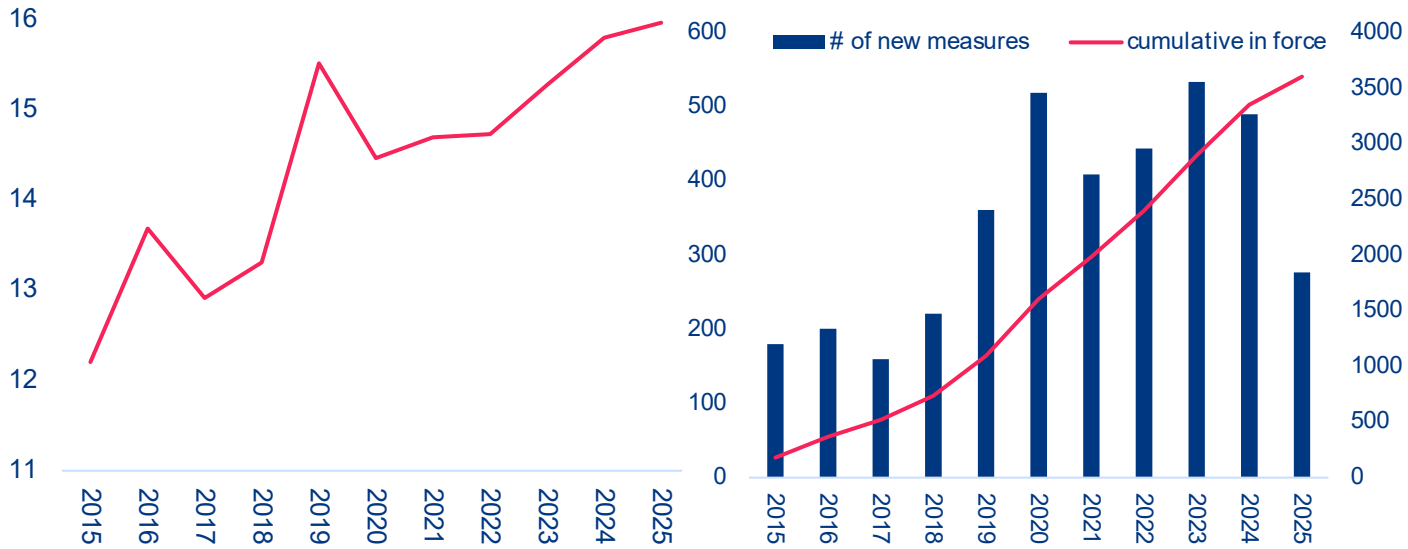



Sources: OCED TIVA, OECD STRI, Allianz Research. Notes: Sector shares are as reported in OECD TiVA VA exports for 2022. AI-related sectors are ICT services. Services restrictiveness based on 2025 data only on ICT services sectors.

**The growing financial support for AI is exacerbating global technological disparities.** Higher-income economies are implementing large-scale AI strategies with the backing of fiscal resources, industrial policy, and targeted support for domestic champions. In contrast, lower-income economies are hampered by fiscal and infrastructure constraints, which limit their ability to take comparable action. This is widening the structural gaps in innovation and trade capacity. The scale of AI-related subsidies is also expanding: the proportion of AI-enabling goods covered by subsidies increased from 12% in 2015 to almost 16% in 2025 (Figure 21, left), and the total number of AI-related subsidy measures now exceeds 3,600 worldwide (Figure 21, right). Although the introduction of new measures slowed in 2025, the overall stock continues to rise. China is in the lead by a large margin, with its subsidy coverage of AI-related goods trade increasing from 14.5% in 2015 to 55% in 2020 and continuing to expand nearly twofold since then. It is followed by South Korea, Malaysia, the US and Japan as the top five AI-related subsidy measure players to expand or protect their position in the AI value chain. These measures primarily target critical materials, advanced semiconductors, AI accelerators (GPUs), semiconductor manufacturing equipment, optical fibres and data-centre components. They are funded through grants, tax credits, loans, state-backed equity injections, electricity subsidies, preferential financing and public support for R&D and infrastructure.

**Initiatives to develop and regulate AI are expanding rapidly, but they are also creating a fragmented policy landscape.** Regulation now extends beyond algorithms to encompass the entire physical and digital infrastructure of AI systems, including data centers, semiconductor supply chains, energy-intensive computing facilities, and cross-border data flows that facilitate AI-driven trade. Governments are no longer merely shaping trade in AI-enabling inputs; they are also actively building industrial ecosystems to secure positions in AI value chains. 23% of countries have set up national AI governance bodies (32 in Europe, 10 in Asia, four in Africa, five in North America, four in Central and South America, and two in Oceania), and 28% have adopted AI regulations, guidelines or standards. These frameworks are increasingly integrating regulation, intellectual property, competition policy, skills development, labor markets and infrastructure investment in order to foster innovation while managing concentration risks. Regional approaches differ significantly. North America has traditionally relied on lighter regulatory frameworks, allowing faster innovation with fewer constraints. China's model is more state-driven, with AI governance closely tied to industrial policy and oversight. Europe occupies a middle ground: while regulation strengthens trust, transparency and adoption, key factors in scaling AI, it also introduces

**Figure 21:** Share of cumulative subsidies on AI-enabling goods in total subsidies, cumulative in force as % of total (left) and number of new subsidy measures in force (right)




Sources: GTA, Allianz Research

compliance and security requirements that can slow innovation cycles, even though many processes are becoming increasingly automatable. Overall, however, regulation is not currently a binding constraint in Europe.
AI governance is emerging as a global trade regime in its own right, which could further reinforce the existing dominance of a select few. At the multilateral level (Table 1), frameworks such as the OECD AI Principles and the G7 Hiroshima Process promote interoperable standards and trusted data flows in order to reduce friction in the trade of AI services.
At the same time, national strategies are becoming increasingly geopolitical. The US ‚Pax Silica' approach links AI directly to trade security through export controls, investment screening, and domestic incentives for the production of chips and computing power.

Meanwhile, China's Digital Silk Road initiative integrates AI infrastructure exports, such as datacenters and cloud platforms, into broader trade and connectivity strategies. Middle Eastern economies are leveraging their energy abundance and sovereign wealth to establish themselves as global compute hubs with AI-friendly regulatory environments. Other initiatives, including the UNESCO AI Ethics Framework and the UN Global Digital Compact, seek to establish shared norms for data governance, model oversight and infrastructure efficiency. Together, these overlapping regimes are increasingly determining where AI is produced, how it is governed and how AI-enabled goods and services flow globally, effectively turning AI governance into an emerging trade regime in its own right.

**Table 1:** Major AI-trade-related international policy initiatives

| Initiative | Lead Actors | Core Focus Areas | Trade Relevant Impacts |
|---|---|---|---|
| **OECD AI Principles (2023)** | OECD countries | Responsible AI, transparency, data governance | Supports interoperable standards for cross border data flows and cloud services; reduces regulatory fragmentation. |
| **G20 AI Principles (2019)** | G20 economies | Human centric AI, innovation, digital economy | Encourages harmonized data governance approaches that facilitate AI enabled services trade. |
| **UNESCO AI Ethics (2021)** | UNESCO members | Ethical standards, inclusiveness, data rights | Shapes global norms for data handling, influencing access to datasets and model training resources. |
| **G7 Hiroshima Process & AI Code of Conduct (2023)** | G7 | Frontier model safety, AI supply chain security | Promotes common benchmarks that support trusted AI supply chains; potential trade conditions for high risk AI systems. |
| **Bletchley Declaration (2023)** | 28 countries incl. US, UK, EU, China | Safety of frontier models | Introduces shared risk management expectations, influencing compliance requirements for cross border AI deployment. |
| **UN General Assembly AI Resolution (2024)** | UN member states | Safe, inclusive global AI governance | Calls for capacity building in digital infrastructure; facilitates AI adoption in developing countries. |
| **Council of Europe Framework Convention on AI (2023)** | Council of Europe | Human rights, democratic governance of AI | Sets obligations that may become preconditions for AI trade with EU markets. |
| **International Network of AI Safety Institutes (2024)** | Multinational | Safety research, model evaluations | Could lead to standardized audits that function as "technical passports" for AI model trade. |
| **UN AI Advisory Body Final Report (2024)** | UN | Global governance mechanisms | Recommends infrastructure investment frameworks and compute governance strategies. |
| **UN Global Digital Compact (2024)** | UN | Digital cooperation, data flows, public infrastructure | Promotes open digital markets and trusted cross border data exchange. |
| **International Scientific Report on Advanced AI Safety (2024)** | Multilateral science groups | Scientific evaluation of AI risks | Provides technical benchmarks and safety thresholds that may condition AI exportability. |
| **US Pax Silicia Strategy** | United States | Chip controls, AI supply chain security, cloud regulation | Reshapes global trade in semiconductors, cloud capacity, and advanced models; creates new dependencies. |
| **China's Digital Silk Road** | China | Digital infrastructure, cloud, AI services exports | Embeds AI capabilities into BRI corridors, strengthening China centric digital trade routes. |
| **Middle East AI Hub Strategy** | UAE, Saudi Arabia, Qatar | Compute clusters, cloud zones, energy powered AI | Turns the region into a global exporter of compute and AI services; attracts multinational AI firms via regulatory free zones. |
| **OECD Cross Border Data Flows** | OECD | Data governance, interoperability, trust frameworks | Provides stock taking of global data flow policies; supports common G7/G20 approaches for enabling AI driven digital trade. |
| **OECD Going Digital: Trade & Data Flows** | OECD | Policy landscape for international data flows | Identifies how data regulations affect international trade and AI-enabled services; informs trade negotiators. |
| **OECD aligned research on AI & digital trade rules** | OECD affiliates, legal scholars | Next gen rules for AI, digital trade, cross border data | Explores regulatory divergence, national security restrictions, and future international digital trade agreements. |

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Allianz Research encompasses Allianz Group Economic Research and the Economic Research department of Allianz Trade.

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