

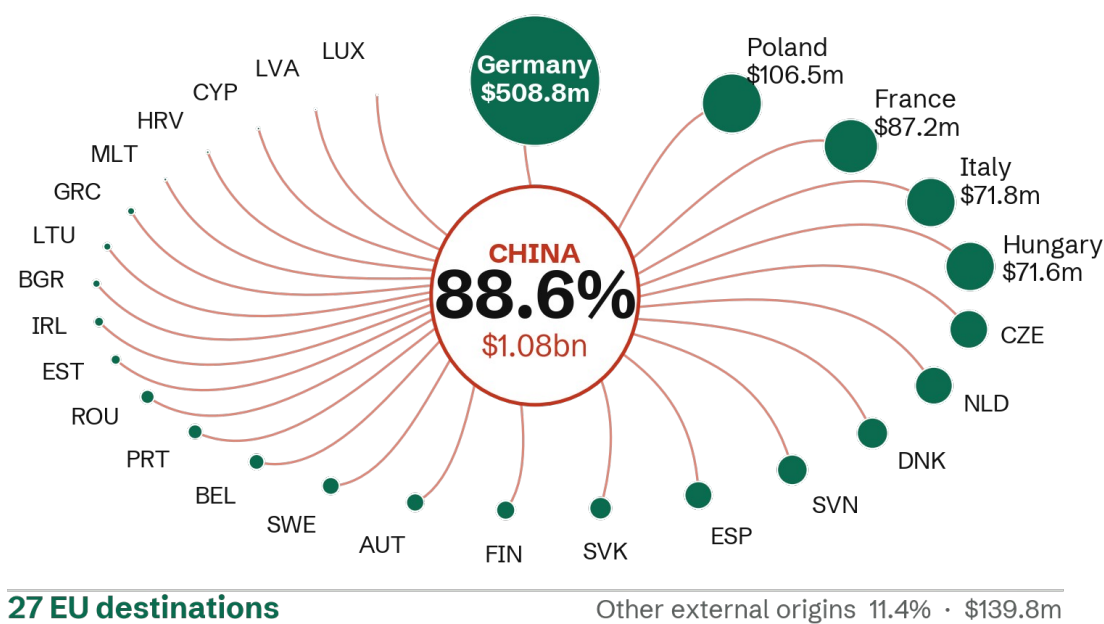
China–Europe Trade Conflict

Supply dependence, market access and business decisions

Symbiosis United Analytics · Actionable Insight Report 005

One Chinese supply hub reaches all 27 EU markets

Permanent metal magnets HS02 850511 Current US dollars 2024



Note EU circle area shows imports from China; equal-width links show observed flows. Layout is schematic. The central share uses all EU27 external imports.

Source CEPII BACI HS02 V202601 Authors' calculations

European firms face a concentrated input supply channel while pork and spirits producers face concentrated sales exposure. AIR 005 turns these different dependencies into procurement pricing and financing decisions.

Edition 1.0 EU27 focus with European corridor context

Prepared by Symbiosis United Analytics
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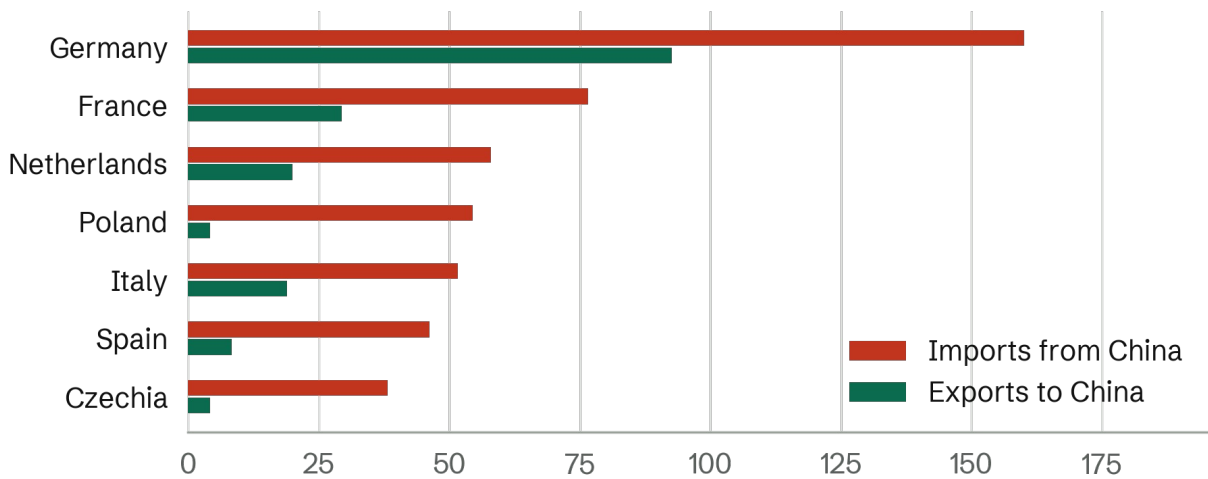
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Germany has the largest two-way China trade among EU members

Billions of current US dollars Top seven EU import destinations 2024



Note Country lanes measure reported destinations, not final consumption. Distribution hubs and re-exports can change country incidence.

Source CEPII BACI HS02 V202601 Authors' calculations

Executive summary

Firms exposed to the China–Europe trade conflict should plan for two different pressures: concentrated Chinese input supply and selective restrictions on European sales. In 2024, China supplies 88.6% of the EU27’s external imports of permanent metal magnets. The EU’s pork and by-product screen sends 26.9% of its external exports to China. These dependencies call for different responses: qualify replacement inputs for production continuity, and protect margin and market access on export contracts.

The aggregate relationship remains large. Eurostat records €559.4 billion of EU goods imports from China and €199.6 billion of exports in 2025, a €359.8 billion deficit. In July 2026, imports rise 8.0% from a year earlier while exports fall 1.6%. The widening gap provides policy context; it does not measure welfare losses or identify the effect of any individual duty. [1, 2]

At a glance

- **Input dependence** \$1.08 billion of China-origin metal magnets and \$26.45 billion in the broad other-accumulator category enter the EU27 in 2024.
- **Export exposure** China buys \$2.48 billion of the pork screen, \$0.93 billion of grape spirits, and \$0.56 billion of the milk cream and cheese screen.
- **Downstream cost channel** A hypothetical 10% increase in prices of directly purchased Chinese intermediate inputs raises modeled computer and optical-equipment costs by 0.85% after EU production linkages.

The decision for the next 90 days

Start with a customs and contract register linking each product to its origin, exporter, legal measure, rate, undertaking status, and renewal date. For critical magnets, map specifications and lead times before reallocating orders. For food and spirits, separate the duty invoice from the commercial decision over who absorbs it. Preserve the option to source or sell elsewhere without treating historical trade as spare capacity.

Evidence status Descriptive trade screens use BACI HS02 V202601 through 2024. The cost scenario uses OECD ICIO 2020. Selected policy measures were checked on 5 October 2026. No causal estimate or firm-specific liability is reported.

Introduction

The conflict changes the terms of market access through duties, price undertakings, procurement restrictions, and export licensing. The selected measures below distinguish their legal scope from the broad trade categories used later in the report. Company treatment and product specifications determine liability; a country-level average cannot replace those conditions.

Measure and start	Scope	Commercial implication
EU BEV duties 30 October 2024	New China-origin battery electric passenger vehicles; company rates 7.8% to 35.3%. [3]	Model landed cost by producer. HS02 870390 is broader than the legal BEV scope.
EU undertaking February 2026	Volkswagen Anhui CUPRA Tavascan; price and volume commitments. [4]	A specific accepted undertaking permits exemption; general guidance alone does not.
China grape spirits 5 July 2025	Grape spirits in containers below 200 litres; rates 27.7% to 34.9%, with accepted undertakings. [5, 15]	Validate producer and price compliance before assuming duty payment.
China pork 17 December 2025	Certain pork and pig by-products; rates 4.9% to 19.8%. [6, 14]	Refresh importer contracts and exporter-specific rate records.
China dairy 13 February 2026	Selected cheeses and milk or cream above 10% fat; rates 7.4% to 11.7%. [7, 13]	Separate product eligibility from the broader HS02 cream category.

Licensing and procurement add separate constraints

China's April 2025 controls cover specified medium and heavy rare earth items, including certain magnet materials. A separate November decision suspends measures numbered 55–58 and 61–62 through 10 November 2026; it does not list April's No 18. Treat the two decisions separately when checking licenses. [8, 9]

The EU's medical-device procurement measure excludes covered China-origin operators in relevant tenders worth at least €5 million net of VAT and limits China-origin device content under covered contracts. BACI records border trade, so this report does not convert tender restrictions into a tariff equivalent. [10]

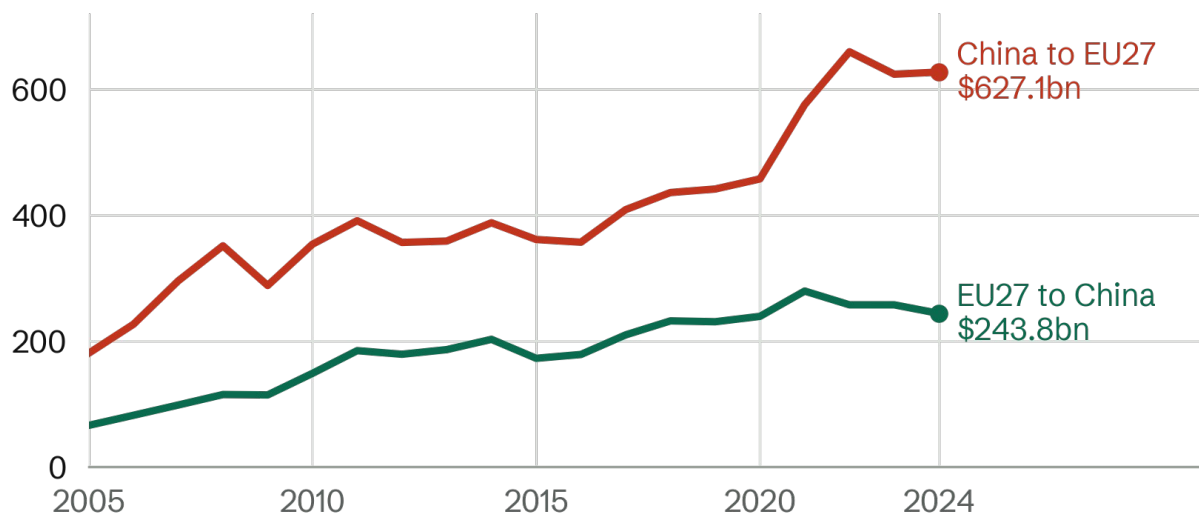
Scope This register covers selected transmission channels central to AIR 005, rather than an exhaustive inventory of every China–EU trade-defence case. Proposals and reported negotiating demands are not coded as enacted duties.

Key findings

BACI records \$627.1 billion moving from China to the EU27 in 2024 and \$243.8 billion in the reverse direction. China accounts for 22.3% of EU external imports; China absorbs 9.1% of EU external exports. Each denominator excludes trade among EU members.

China to EU trade remains more than twice the reverse flow

Billions of current US dollars All goods Fixed EU27 membership 2005–2024



Note BACI reconciles exporter and importer reports. These USD series are not spliced to Eurostat euro customs totals.

Source CEPII BACI HS02 V202601 Authors' calculations

This asymmetry creates different bargaining and adjustment problems. A disruption to Chinese supply can interrupt European production even when the affected input is cheap. A restriction on European exports can be costly for the producers concentrated in that market even when the aggregate bilateral value is smaller. The relative trade values do not establish which side suffers the greater welfare loss.

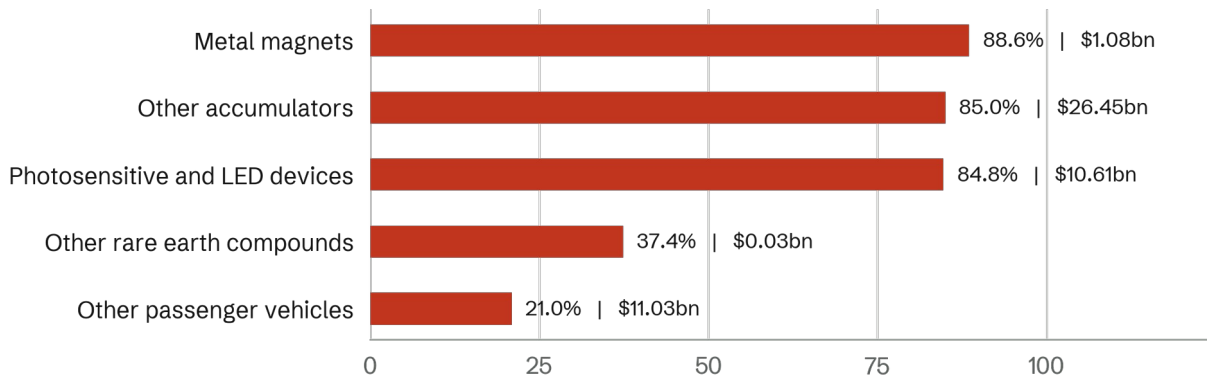
What the recent data add

Eurostat's 2025 totals and July 2026 release indicate continuing pressure on the trade balance after the first BEV duties. They do not isolate the tariff effect: exchange rates, demand, product composition, investment, and trade redirected from other markets also change flows. An evaluation needs monthly product and producer data with a credible comparison group. [1, 2]

Context and conditions

Magnets and two broad electronics screens depend heavily on China

China share of EU27 external imports in percent 2024 Values in current US dollars



Note External imports exclude all intra-EU trade. These are HS02 product screens, not quantities of legally restricted goods.

Source CEPII BACI HS02 V202601 Authors' calculations

The largest China-origin flow among these screens is \$26.45 billion of other accumulators. Magnets are smaller at \$1.08 billion, but China's 88.6% share leaves a narrow external supply base. The photosensitive and LED-device screen records \$10.61 billion from China; its 84.8% share cannot be interpreted as the China share of solar cells alone.

HS02 predates separate modern codes for lithium-ion batteries and battery electric cars. Code 850 780 covers other accumulators, 870 390 other passenger vehicles, and 854 140 photosensitive semiconductor devices and LEDs. The current BEV measure applies to a narrower legal definition. No duty rate is multiplied by these broad trade values in AIR 005.

Production continuity depends on specifications

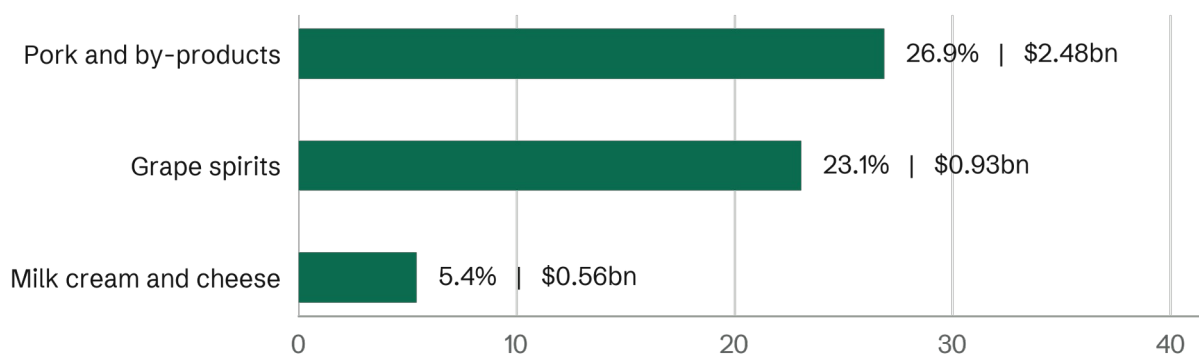
Magnet grade, rare earth content, temperature tolerance, and qualification requirements can make a small input hard to replace. The observed China share identifies where to begin a supplier audit. It does not establish how quickly an alternative plant can deliver or whether a shipment contains a controlled material. Treat chemistry, exporter licensing, and customer certification as separate checks.

Interpretation A high external-import share can coexist with EU production and substantial intra-EU trade. The chart measures dependency within the external sourcing channel, not China's share of total European consumption.

Patterns in the evidence

China buys about one quarter of the pork and spirits export screens

China destination share of EU27 external exports in percent 2024



Note Pork includes broad fat and offal families; grape spirits include all container sizes. Dairy includes HS02 cream above 6% fat and cheese.

Source CEPII BACI HS02 V202601 Authors' calculations

China takes 26.9% of the EU's external pork-screen exports and 23.1% of grape spirits. The comparable dairy share is 5.4%. This difference suggests more concentrated destination risk in the first two baskets; it says nothing about producer margins, which the trade data do not observe.

Country concentration sharpens the incidence. Spain supplies \$1.18 billion of the pork screen sent to China, 47.7% of the EU total; Denmark and the Netherlands each supply about \$0.44 billion. France supplies \$0.92 billion of grape spirits, 98.9% of the EU total. A bilateral dispute therefore reaches distinct regional producer groups rather than a representative European exporter.

Price undertakings change the commercial adjustment

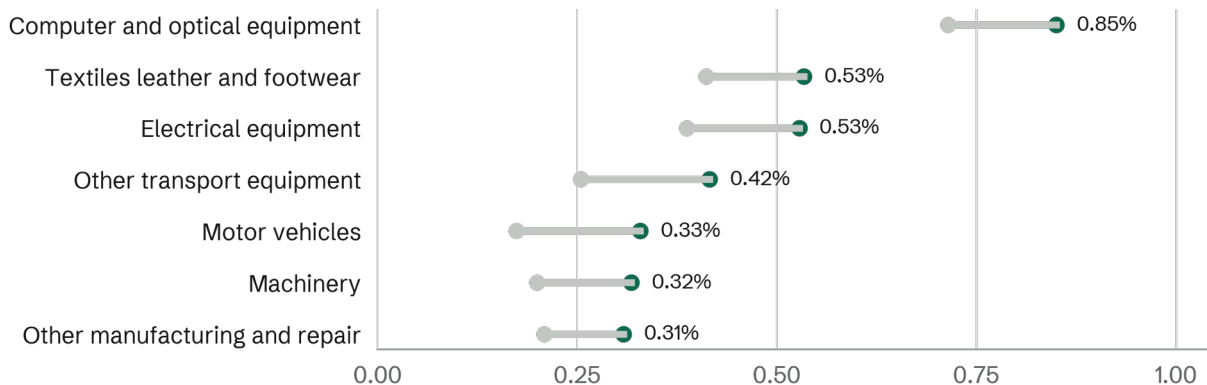
A qualifying undertaking replaces a duty with enforceable price conditions. Grape-spirit firms covered by accepted commitments may avoid anti-dumping payment while preserving a price floor. The CUPRA Tavaskan case similarly links an exemption to a specific accepted offer. Duty relief can therefore reduce flexibility to discount, and its commercial value depends on compliance and demand at the committed price. [4, 5]

Boundary The BACI baskets overcover some legal scopes. Neither the displayed values nor their sum is a customs duty base. Current company rates, container size, fat content and product descriptions remain necessary to calculate liability.

Downstream production

EU production links amplify direct Chinese input cost pressure

Percent change in unit cost under a hypothetical 10% Chinese input price increase 2020 structure



Note Grey dots show direct cost exposure; green dots include production links within the EU27. Output-weighted sector averages.

Source OECD ICIO 2023 edition small tables Authors' calculations

A uniform 10% rise in the prices of directly purchased Chinese intermediate inputs raises modeled costs by 0.85% in computer and optical equipment, 0.53% in electrical equipment, and 0.33% in motor vehicles. The automobile result exceeds its direct exposure because the sector buys inputs from other EU industries that also use Chinese supply.

This is a fixed-coefficient accounting scenario. Quantities, sourcing shares, EU value-added costs, and markups stay constant; extra-EU indirect pathways are omitted. The model does not predict lost output, employment, consumer inflation, or the effect of BEV duties. Substitution and exporter price changes may weaken cost pressure, while a physical shortage can interrupt production in ways this price calculation cannot represent.

Prioritize inputs by the cost of interruption

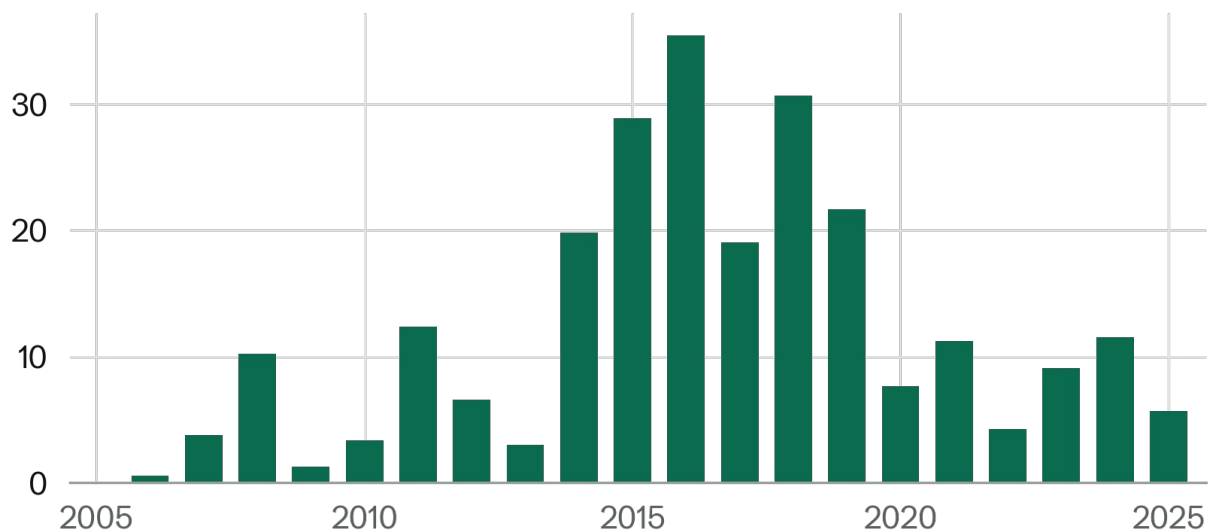
Use the sector screen to select production lines for a bill-of-materials review. Rank each critical component by qualification time, inventory coverage and the revenue lost during a stoppage. A lower expenditure share should not move a technically irreplaceable magnet below a readily substituted bulk input.

Model vintage The code also calculates 2018 and 2019 results for comparison. The main exhibit uses 2020 consistently; it does not present the local historical table as the current European production structure.

Investment and localization

Chinese investment in the EU spans several policy cycles

Recorded investment transactions in billions of US dollars Annual sums 2005–2025 first half



Note CGIT tracks large recorded investments. Construction is separate and excluded. The 2025 bar is a partial year.

Source AEI and Heritage China Global Investment Tracker 2025 half-year file Authors' calculations

The local China Global Investment Tracker records \$246.1 billion of investments in current EU27 members through the first half of 2025. Of this historical sum, \$49.5 billion falls in 2020–2025 H1. These recorded deal amounts are neither a current investment stock nor an inventory of usable manufacturing capacity. They help locate corridors for further project checks.

The World Bank bilateral file places EU27 inward FDI stock from China at \$78.7 billion in 2021, using one reporter-side inward measure per pair. Its 2018–2019 records contain both original and revised observations; this report keeps the flagged revision and records the duplicates in an audit file. Sectoral FDI stops in 2019 and cannot verify today's EV or battery plants.

A plant location is only part of the origin decision

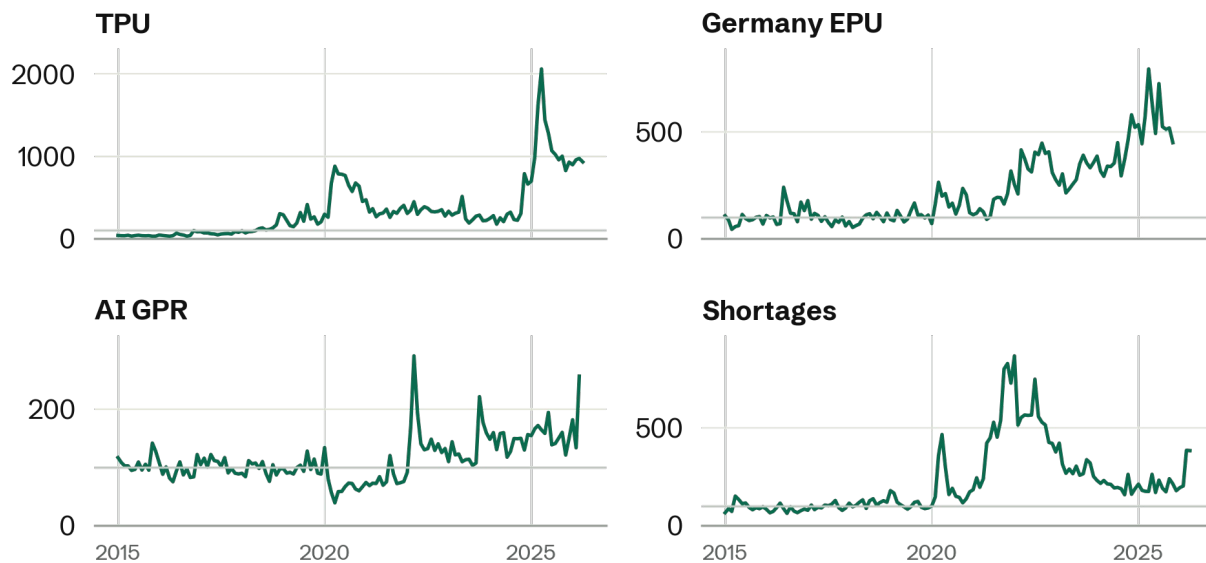
Local assembly may shorten transport and serve customers, but it does not by itself establish customs origin or eliminate Chinese input dependence. Compare imported vehicles, production under an accepted price undertaking, and local manufacturing using project-level costs, origin rules, input sourcing and expected utilization. The investment databases do not supply those project economics.

Recent context The European Commission lists €79.8 billion of Chinese FDI stock in the EU in 2024. That euro series is kept separate from historical World Bank USD observations and from CGIT deal values. [12]

Uncertainty and finance

Policy and supply indicators rise above their earlier baselines

Monthly indices rebased to each series' 2015–2019 mean equal to 100



Note Panels use different vertical scales. Series end between November 2025 and April 2026; the chart contains no October nowcast.

Source Local TPU EPU AI GPR and Shortage Index files Authors' calculations

Monthly TPU averages 3.3 times its 2015–2019 baseline in 2024 and 11.6 times in 2025. Germany's EPU also remains elevated. These newspaper-based indicators contain shocks outside the China–EU dispute; they support stress-testing commitment length without identifying a bilateral causal effect.

AI-GPR, global and country EPU, US trade-policy EPU, and shortages remain separate context series. Their different signals cannot supply a composite risk probability or the likelihood of a specific license refusal.

Translate a cost wedge into financing needs

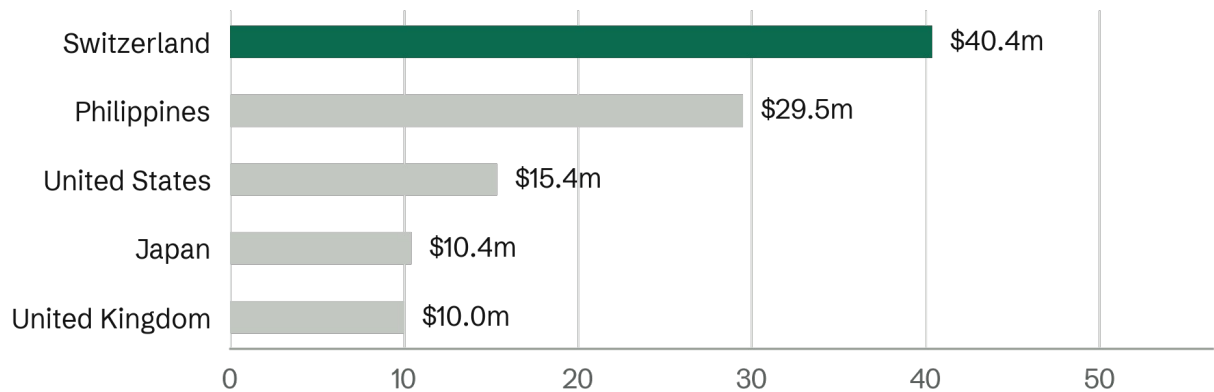
For an explicitly assumed \$100 million annual customs-value flow facing a 20.7% additional duty, the annual direct duty is \$20.7 million before other taxes and exemptions. If duty-inclusive inventory remains financed for 60 days, the additional average inventory financing is \$3.40 million: \$20.7 million multiplied by 60 and divided by 365. This arithmetic uses assumed terms; it is not a measured cost for any firm.

Finance coverage Local GDP stops in 2023. Bank-financing surveys span uneven dates in 2005–2023, preventing a current EU working-capital ranking.

Implications

Non-China external magnet suppliers serve a much smaller market

Millions of current US dollars imported by the EU27 HS02 850511 2024



Note Top five non-China external origins. Existing exports establish trade presence, not unused capacity or Chinese-content independence.

Source CEPII BACI HS02 V202601 Authors' calculations

The external magnet market outside China totals only \$139.8 million, compared with \$1.08 billion supplied by China. Replacing all Chinese supply would require a shift far larger than the currently observed alternative channel. A shortlist should begin with origins already serving the EU and then test product grade, capacity, upstream rare earth sourcing, lead times and qualification costs.

Channel	What the data establish	Decision implication
Critical inputs	High China shares and narrow external supplier bases.	Prioritize technical qualification and production continuity.
Food and spirits sales	Concentrated China destination shares and country exposure.	Protect contracts and qualify alternative sales channels.
Localization	Historical investment corridors and broad sector links.	Evaluate individual projects and origin requirements.

The RTA file records no agreement coverage for China–EU member pairs in 2025. Distance and institutional context can inform project diligence, but these inputs do not establish a tariff exemption. Re-exporting through another country also does not, by itself, change the origin of a product. Historical trust and cultural measures are unsuitable as current business-risk scores.

Services and ownership The channel lacks a bilateral services trade dataset and usable licensed firm-level disclosure authority. Shipping, software and finance channels are discussed as mechanisms, without an estimated services exposure or a proprietary company ranking.

Recommendations

Separate the operating response into customs classification, technical continuity, and commercial resilience. Assign owners and explicit evidence requirements so a trade screen becomes a concrete decision rather than an unverified supplier list.

Horizon and owner	Action	Evidence to close the decision
Now to 30 days Trade compliance	Create a product exporter origin register and record accepted undertakings.	Current tariff-line scope, producer code, rate and exemption evidence.
Now to 90 days Procurement and engineering	Test a second source for critical magnet and electrical inputs.	Grade equivalence, samples, audit, license pathway and customer approval.
Now to 90 days Sales and finance	Renegotiate duty allocation and price conditions; stress-test 30 60 and 90 inventory days.	Contract terms, shipment values, credit line and customer demand at the new price.
3 to 12 months Strategy	Compare qualified imports with local production and alternative sales markets.	Project costs, utilization, origin rules, upstream sourcing and route to market.

Use shipment-level scenarios

On an assumed \$100 million of legally eligible customs value, incremental duties range from \$7.8–35.3 million for the covered BEV producer rates, \$4.9–19.8 million for pork, \$7.4–11.7 million for dairy, and \$27.7–34.9 million for grape spirits. These are separate fixed-value calculations, before existing duties and taxes; accepted undertakings can alter payment. They are not estimates of total bilateral duty receipts. [3, 5–7, 13–15]

Conclusion

The strongest immediate response is selective. Secure qualified supply for inputs that can stop production, and protect commercial terms where China is a concentrated sales destination. Broad decoupling can raise costs before replacement capacity exists; waiting for a comprehensive settlement leaves current shipment and contract risks unresolved.

The next analytical step is a monthly EU tariff-line panel matched to exporter treatment and firm bills of materials. That evidence can distinguish substitution, price absorption and market loss, while testing how much of the historical supply dependence remains in current production.

Appendix

Notes

Trade construction The code scans all 20 local BACI years from 2005 through 2024. EU27 membership is fixed at its current composition, including Croatia before accession and excluding the UK throughout. Values are thousands of current USD in the input and are divided by one million for billions of USD. Intra-EU flows are excluded from external import and export denominators; no mirror observations are summed.

Screen	HS02 codes	Interpretation boundary
Industrial imports	870390; 850780; 850511; 284690; 854140	Other vehicles and accumulators are broad. Magnets do not identify chemistry. Photosensitive and LED devices do not isolate solar cells.
Pork and by-products	020311 020312 020319 020321 020322 020329 020630 020641 020649 020900 050400	Fat and animal guts codes overcover some non-pig goods. Modern 020910 maps within broader HS02 020900.
Dairy	040130 040610 040620 040630 040640 040690	HS02 040130 includes milk and cream above 6% fat; the current measure targets above 10%.
Grape spirits	220820	All container sizes; current legal scope excludes containers of at least 200 litres.

Concentration Import-origin HHI equals the sum of squared origin shares in the defined external market. It ranges from zero toward one and measures country concentration, not firm concentration. Supply alternatives are ranked by observed EU import value; world exports are also saved, but no weighted capacity score or spare-capacity estimate is invented.

Cost model For each EU country-industry j , b_j equals directly purchased Chinese intermediate inputs divided by gross output. A_{EU} is the matrix of EU intermediate inputs divided by the receiving industry's gross output. The scenario solves $\Delta p = (I - A_{EU})^{-1} b \times 0.10$. Sector summaries weight country results by gross output. The appendix code retains all country-industry observations.

Identification Annual product baskets, company-specific treatment, coincident macro shocks and broad codes preclude a credible causal tariff estimate here. The 2018 US tariff evidence in Amiti, Redding and Weinstein motivates testing pass-through; its estimates are not transferred to Europe. [11]

Data coverage

The source audit inventories 93 files across eight data families plus the citation guide. All relevant public datasets are examined; archives, duplicate workbook copies, lookup tables and documentation are treated as support rather than independent observations. The source inventory records every path and file size.

Local family	Use in AIR 005	Boundary or audit result
01 BACI product networks	2005–2024 bilateral trade, origins, export destinations, concentration and supplier screen.	HS02 V202601; source concordance metadata retained; broad categories labeled explicitly.
02 Dyadic context	2020 gravity distances; China–EU tax and cultural context; trust coverage audit.	27 dyads after duplicate removal; trust survey lacks China; tax measures are historical research covariates.
03 ICIO	2018–2020 price-cost screens; 2020 main exhibit.	2023 edition small tables; older matrices and processed coefficients are available supporting vintages.
04 Investment	Bilateral FDI through 2021; sectoral FDI through 2019; CGIT to 2025 H1.	Revision flag resolves 2018–2019 duplicates. Stocks flows and transaction values stay separate.
05 Risk and shortages	TPU country global and categorical EPU AI-GPR Shortage Index.	Distinct indices and end dates; no bilateral causal attribution or synthetic probability.
06 World Bank	Latest GDP per capita GDP and bank-finance observations.	GDP stops in 2023 locally; finance surveys have uneven years. The metadata-named CSV duplicates data rather than providing a new sample.
07 Agreements	China–EU pair coverage in 2025.	No RTA agreement flag; this is not a line-level customs schedule.
99 FactSet licensed	File inventory and methodology presence only.	License rights are not supplied; no raw company records or derived firm rankings enter public outputs.

Cultural distance, trust and capital-tax files cannot explain current trade changes without an estimated design and suitable coverage. Their audit informs the decision to avoid a mechanical composite score. The local datasets also lack current freight prices, plant-level capacity, services trade, and household or worker incidence measures.

Reproducibility analysis/build_data.py creates derived tables; analysis/build_figures.py creates nine exhibits in SVG PDF and PNG. analysis/build_report.py patches the retained Design Report template. Exact raw inputs remain in Origin_Data and are not redistributed.

Source register

Official policy and recent trade sources below were accessed on 5 October 2026. Bracketed numbers refer to this register. Dataset citations follow below; full provenance accompanies the report.

- [1] Eurostat Trade in goods with China in 2025 10 April 2026
- [2] Eurostat July 2026 trade release 15 September 2026
- [3] European Commission Regulation 2024 2754 BEV duties current consolidated version
- [4] European Commission Volkswagen Anhui price undertaking 10 February 2026
- [5] MOFCOM Announcement 2025 No 34 grape spirits and price undertakings
- [6] MOFCOM Announcement 2025 No 80 pork and by-products
- [7] MOFCOM Announcement 2026 No 9 dairy products
- [8] MOFCOM and Customs Announcement 2025 No 18 rare earth controls
- [9] MOFCOM and Customs Announcement 2025 No 70 suspension of selected controls
- [10] European Commission Regulation 2025 1197 medical device procurement
- [11] Mary Amity Stephen J Redding and David E Weinstein 2019 The Impact of the 2018 Tariffs on Prices and Welfare JEP 33 4 pages 187 to 210
- [12] European Commission China trade relations and 2024 investment data
- [13] MOFCOM Final dairy duty range 12 February 2026
- [14] MOFCOM Final pork duty range 16 December 2025
- [15] MOFCOM Final grape spirits duty range 4 July 2025

Dates Announcement dates and implementation dates are distinguished. A later webpage publication date does not replace the date of the underlying legal act. Shipment decisions require checking the current act and applicable company annex.

Dataset citations

CEPII BACI HS02 V202601 Gaulier and Zignago 2010. CEPII Gravity V202211 Conte Cotterlaz and Mayer 2022. OECD ICIO 2023 edition Yamano and coauthors 2023 doi 10.1787/5a5d0665-en. World Bank FDI 2022 Steenbergen and coauthors 2022. AEI and Heritage China Global Investment Tracker 2025 half year.

EPU Baker Bloom and Davis 2016; global EPU Davis 2016. TPU Caldara and coauthors 2020. AI-GPR Iacoviello and Tong. Shortages Caldara Iacoviello and Yu 2025 doi 10.17016/IFDP.2025.1407. World Bank WDI and Enterprise Surveys. Mario Larch RTA rta_20260111. GeopoliticalDistance.org capital tax and cultural data; Eichengreen and Saka bilateral trust.

Full citations file versions processing decisions and reproducibility instructions accompany the report in README.md and derived/source_inventory.csv. The local source citation guide supplies dataset URLs. Raw data and licensed records are not redistributed.