

China's Support for Russia: Implications for Sanctions and European Security

Tatyana Deryugina and Oleksandr Shepotylo¹

September 2026

Key messages

1. **China has become the decisive external enabler of Russia's war.** Beijing is Russia's largest customer and the main source of inputs Russia's defense industry can no longer obtain in the West.
2. **Pressure on the China channel yields large returns.** China accounts for about 40 percent of Russia's goods trade and close to 60 percent of its imports.
3. **The China–Russia relationship is asymmetric in Europe's favor.** Russia is existentially dependent on China; China is not dependent on Russia.
4. **Europe has massive and largely unused leverage over Beijing.** The EU purchased about USD 560 billion of Chinese goods in 2025, and the security payoff from using this leverage justifies the risk of Chinese retaliation.

Core recommendations

1. **Make the China channel an explicit pillar of the EU's Ukraine and sanctions strategy.** Offer China conditional, staged access to European markets and related economic benefits in exchange for verifiably ending military-relevant support to Russia, backed by credible costs for continued support.
2. **Build the trade-monitoring and verification capacity needed to make conditionality credible.** A standing EU unit should track Chinese exports to Russia and to transshipment hubs and publish compliance assessments that trigger each step of the inducement-and-pressure ladder.
3. **Invest in reducing vulnerability to retaliation.** Europe should diversify critical-mineral supply and build stockpiles, screen its defense supply chains for Chinese inputs, and compensate member states hit hardest by any retaliation.
4. **Coordinate with the United States, the United Kingdom, Japan, South Korea, and other partners** to prevent re-routing and present China with a single, unified incentive structure.

¹ Tatyana Deryugina is an Associate Professor of Finance at the University of Illinois Urbana-Champaign. Oleksandr Shepotylo is a Reader in Economics at Aston University.

Strategic context

Russia's military-industrial base has proven more resilient to Western sanctions than most analysts expected in 2022. A key reason is China. Chinese purchases of Russian energy supply the hard currency that finances the war; Chinese factories supply the machine tools, microelectronics, optics, and drone components that Russia's defense industry can no longer source in the West; and Chinese intermediaries and financial channels keep both flows moving despite over four years of tightening export controls. A strategy that does not address the China channel has a substantially lower probability of ending the war on terms acceptable to Ukraine and Europe.

The alignment between Moscow and Beijing is deliberate. Three weeks before the full-scale invasion in February 2022, the two governments declared a "no-limits" partnership. Beijing has since stopped short of a formal alliance or open arms transfers and kept a measured public distance from the war, but the economic relationship has deepened every year, with China's share of Russia's trade more than doubling. On the non-economic front, senior officials and intelligence agencies across Europe have warned that Russian and Chinese hybrid campaigns increasingly converge (Kremidas-Courtney 2025).

China's involvement matters for Europe in two ways. First, a war of aggression on the EU's border is a European security problem, and Chinese support is what allows Russia to sustain it. China's behavior therefore threatens European security directly. Second, tolerating this behavior signals that great-power support for a war of aggression is essentially free, a lesson that will not be lost on other would-be aggressors, or on Beijing itself as it weighs its options in the Indo-Pacific.

The stakes are large. Above all, continued Chinese support raises the risk that Ukraine loses the war, the consequences of which would be catastrophic for Europe: a rearmed, emboldened Russia in control of a large country on the EU's doorstep, with every incentive to confront NATO next, starting with the Baltic states. Even if it does not come to that, Chinese support materially lengthens the war and raises its human and fiscal cost for Ukraine and for the European countries financing its defense while rearming themselves.

Deryugina, Dzholos and Shpanel-Yukhta (2026) document that Russia's war economy depends precariously on a narrow set of external supports (chiefly energy revenue and Chinese backing) and that weakening either pillar would seriously undermine Russia's ability to sustain prolonged military operations.

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This brief examines the Chinese pillar channel by channel. First, we analyze the bilateral trade and energy revenue that finance the war, the dual-use and drone-component supply that equips it, and China's place in the network that routes restricted goods to it.² We then turn to the leverage Europe holds and how a calibrated policy of inducements and pressure aimed at China could be designed. Because Russia stopped publishing detailed customs data after the full-scale invasion, we reconstruct Russia's totals from partner-reported (mirror) statistics. Full methodological details are in the Appendix.

How China sustains Russia's war

Economic ties

The China–Russia bilateral goods trade is at an all-time high (Figure 1).³ After a brief dip in spring 2022, trade climbed steeply to a permanently higher plateau and has recently reached new highs.

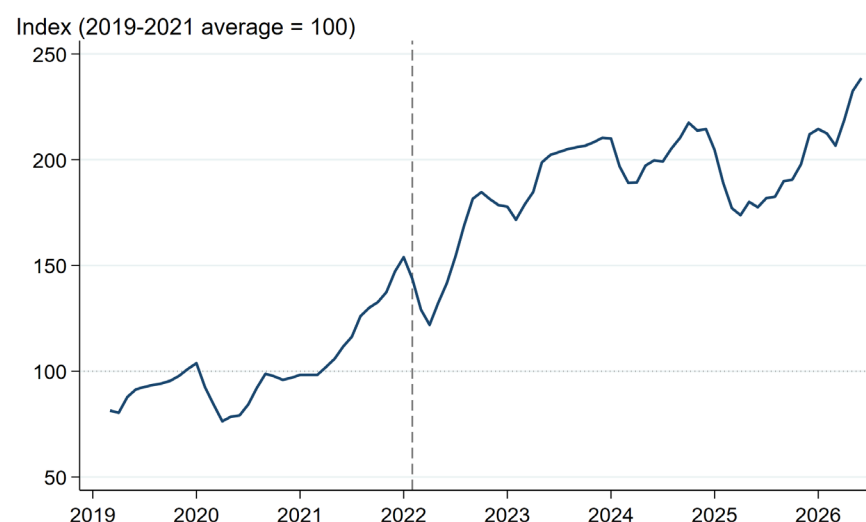


Figure 1. China–Russia bilateral trade, 2019–2026.

Notes: 3-month moving average of monthly goods trade (China's imports from plus exports to Russia), indexed to the 2019–2021 monthly average = 100. The dashed vertical line marks the February 2022 full-scale invasion.

Source: Trade Data Monitor; authors' calculations.

The immediate post-invasion dip was caused by a temporary but substantial fall in China's exports to Russia. This pattern is consistent with Chinese firms initially pulling back to gauge the Western response, then resuming and expanding business once feared secondary measures failed to materialize.

China supplied USD 111 billion of Russia's imports, about two and a half times as much as the next nine largest suppliers combined.

² China has also provided Russia with diplomatic protection: blocking or diluting action at the UN, amplifying narratives that blame the West rather than the aggressor for prolonging the war, and lending Moscow the legitimacy of a great-power partnership. This brief, however, focuses on the economic relationship between the two countries.

³ Both directions have grown: China's exports to Russia and its imports from Russia each stood at roughly twice their 2019–2021 average over the twelve months to June 2026 (Appendix Figure A3).

This trade relationship is asymmetric. In 2025, Russia accounted for only 3.6 percent of China's goods trade (up from 2.4 percent in 2019). But China now accounts for about 40 percent of Russia's goods trade, more than double its 2019 share (18 percent). The dependence keeps deepening: in the first four months of 2026, about 58 percent of everything Russia imported came from China, and 37 percent of everything it exported went there. No other Russian trading partner comes close (Figure 2). Over the twelve months to April 2026, China supplied USD 111 billion of Russia's imports, about two and a half times as much as the next nine largest suppliers combined. China also bought USD 132 billion of Russia's exports, more than twice as much as India, the second-largest buyer.

Moscow cedes part of its oil rent to Beijing because it cannot afford to lose its largest remaining customer.

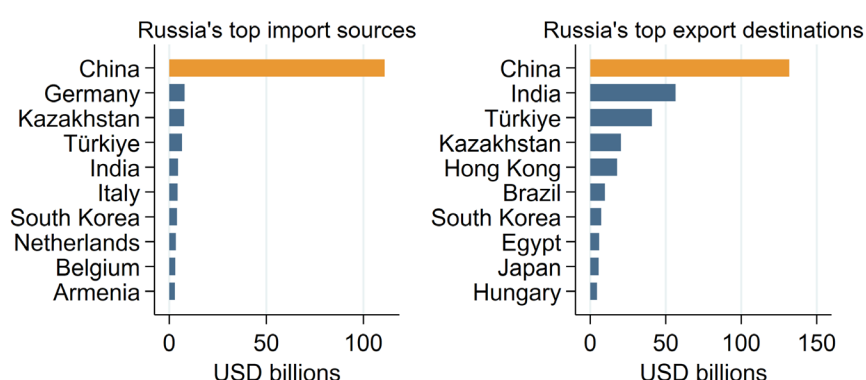


Figure 2. Russia's top trade partners, trailing 12 months to April 2026.

Notes: Mirror estimates constructed from partner countries' own reported trade with Russia (see Appendix Figure A1 for a validation against Russia's own pre-invasion statistics). Germany's remaining exports to Russia consist largely of pharmaceuticals and food, which are exempt from sanctions.

Source: Trade Data Monitor; authors' calculations.

China's energy purchases are a core source of revenue for Russia. China imported USD 92 billion of Russian energy in 2024 and USD 75 billion in 2025, about a fifth of China's energy imports. China also extracts a persistent price advantage from Russia's isolation. Before the invasion, Russian crude sold to China at essentially the same price as crude from China's other suppliers (Figure 3). From 2022 onward, a discount of about 5–9 percent per year appeared and has persisted, reaching about 13 percent in monthly data at the turn of 2026 and again in mid-2026. This discount is a measure of Russia's dependence on China: Moscow cedes part of its oil rent to Beijing because it cannot afford to lose its largest remaining customer. It also says something about Beijing's motives: China extracts a financial benefit for its support, which looks more like opportunism than ideological commitment.

The discount is also a direct loss to the Russian budget: the net fiscal take is about 58 percent of the oil price above USD 13.5 per barrel

(Vakulenko 2026). At 2025 prices and quantities, a 10 percent discount costs the treasury about USD 4 per barrel, or about USD 3 billion a year, 3 percent of Russia's federal oil and gas revenue. If the same discount applied to all of Russia's 4.7 million barrels a day of crude exports, the loss would be about USD 7 billion a year, or 7 percent (see the Appendix).



Almost a third of Russia's external trade is now settled in yuan, up from less than 2 percent before the invasion.

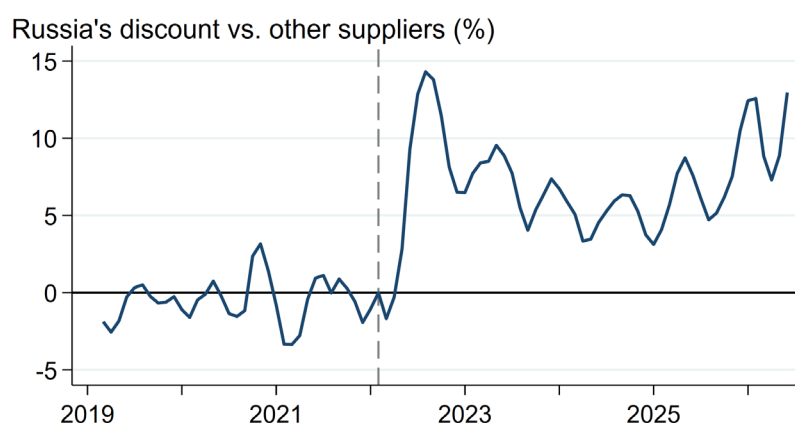


Figure 3. China's crude-oil import prices and Russia's discount, 2019–2026.

Notes: 3-month moving averages of monthly unit values (import value divided by quantity, in USD per barrel) of China's crude-oil imports (HS 270900) from Russia and from all other suppliers combined. The discount is the percentage by which the Russian unit value falls below the non-Russian unit value in the same month. Details in the Appendix.

Source: Trade Data Monitor; authors' calculations.

Russia's financial architecture has also become more China-dependent. Almost a third of Russia's external trade is now settled in yuan, up from less than 2 percent before the invasion (MERICS 2026; Prokopenko 2024). The shift uses a Russia–China cross-border clearing infrastructure that the US Treasury exposed and designated in January 2025 (US Department of the Treasury 2025). Yuan settlement insulates the Russia–China relationship from Western financial

sanctions and turns China's currency into a practical instrument of sanctions evasion.

Military-industrial ties

Revenue alone does not build missiles and drones; Russia also needs military components. The customs data are unambiguous: China is the dominant supplier of the dual-use inputs that underpin Russia's defense-industrial base. To establish this, we track the items on the Common High Priority List (CHPL): the 50 six-digit Harmonized System (HS6) codes that Western export-control authorities identify as the components Russia most urgently needs and can least easily substitute, organized into tiers ranging from advanced integrated circuits (Tier 1) to computer-numerical-control (CNC) machine tools (Tier 4B) (US Bureau of Industry and Security 2024). We also track 35 drone-component and battlefield-electronics codes outside the formal list; together, these 85 codes are the core dual-use codes used throughout this brief.

Chinese exports of the 85 core codes to Russia averaged about USD 265 million per month before the invasion and about USD 525 million per month after it, a 98 percent increase (Figures 4 and 5). The 50 CHPL items alone rose from about USD 205 million to about USD 370 million per month (+80 percent). The EU's much broader dual-use control list gives a similar picture: those flows rose from about USD 1.1 billion to about USD 2.5 billion per month (+121 percent).⁴

The fastest growth has been in the categories most directly tied to weapons production. Exports of CNC machine tools are up over 500 percent relative to pre-invasion averages. These machines cut the precision metal parts of missile bodies, artillery systems, and armored vehicles; China supplied more than 60 percent of the CNC machines Russia imported in 2023–2024 (Economic Security Council of Ukraine 2025; Kyiv Independent 2025).

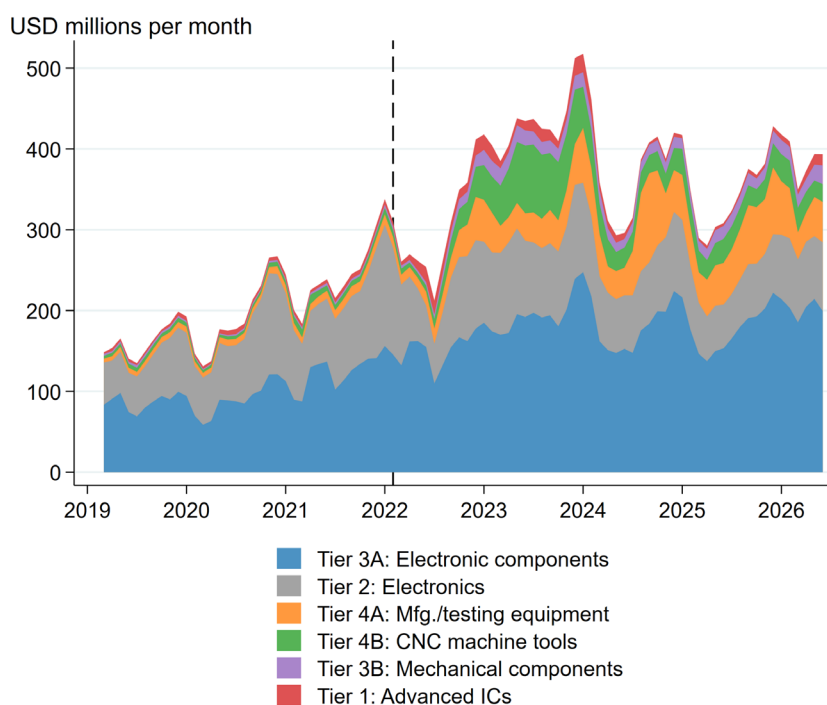
Exports of equipment for manufacturing and testing electronic components and circuit boards are up about 475 percent. This equipment lets Russia mass-produce the electronics inside the Geran (Shahed-type) strike drones and cruise missiles it launches at Ukrainian cities and power infrastructure almost nightly.

Exports of advanced integrated circuits are up more than 115 percent. These chips provide the guidance, navigation, and communications of the Kh-101 and Iskander missiles and of the Geran drones, the weapons behind Russia's long-range strikes on civilians. Ukraine's Defence Intelligence has catalogued the foreign components recovered

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⁴ These increases are not driven by a general boom in Chinese exports. The appendix confirms this by comparing changes in China's CHPL exports to Russia to changes in (1) the same exports to eight comparable non-sanctioned emerging economies and (2) non-dual-use goods exports to Russia.

from these systems and estimates that Chinese parts made up 60–65 percent of the electronics in a Geran-2 drone recovered in 2025 (Defence Intelligence of Ukraine 2026; Ukrainska Pravda 2025).



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Figure 4. China's dual-use exports to Russia by CHPL tier, 2019–2026.

Notes: 3-month moving averages. Tiers follow the Common High Priority List, which ranks items by how critical they are to Russian weapons systems and how hard they are to substitute, from Tier 1 (highest concern) down to Tier 4. Tiers are stacked in order of post-invasion value, largest at the bottom. Tier 3B excludes HS 901380 (see appendix for details).

Source: Trade Data Monitor; authors' calculations.

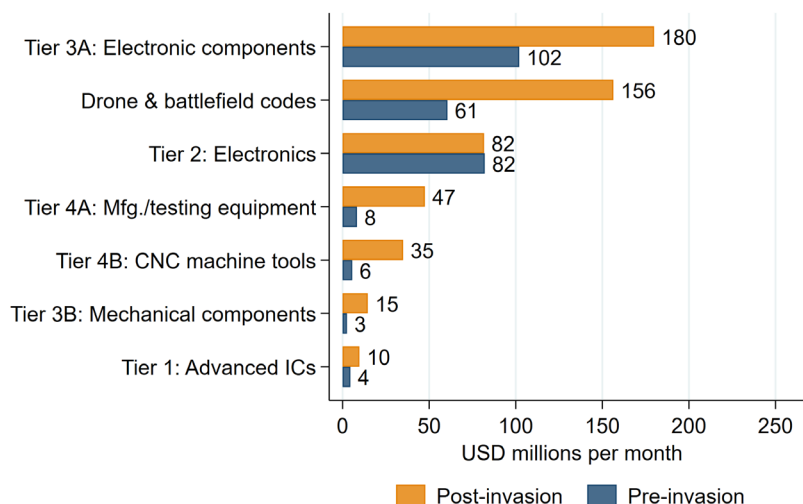


Figure 5. China's dual-use exports to Russia by CHPL tier, before and after the February 2022 invasion.

Notes: Monthly averages over January 2019–January 2022 (pre-invasion) and February 2022–June 2026 (post-invasion), showing the 50 CHPL items plus the 35 drone-component and

battlefield-electronics codes (together, the 85 core dual-use codes). Tier 3B excludes HS 901380 (see appendix for details).

Source: Trade Data Monitor; authors' calculations.

Independent assessments reach the same conclusion. A classified German Foreign Ministry assessment presented to EU foreign ministers in May 2025 attributed about 80 percent of Russia's sanctions circumvention to China, including Hong Kong (RFE/RL 2025), and Bloomberg reports that more than 90 percent of Russia's sanctioned-technology imports now route through China (Nardelli 2026; USCC 2026), and an exporter-level investigation by The Insider found Chinese firms dominating the supply chains that sustain Russia's war effort (bne IntelliNews 2026). As the next section shows, most of that is China's own production going directly to Russia, not Western goods re-exported through it. China is therefore not one supplier among many but the dominant source of the goods Russia's war effort most needs.

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The drone channel deserves attention because drones now dominate the battlefield and are Russia's weapon of choice for terrorizing Ukrainian civilians far from the front line. Chinese exports to Russia of the customs codes most reliably associated with drone components roughly tripled: from a pre-invasion average of just under USD 100 million per month to about USD 300 million per month by mid-2026 (Figure 6).

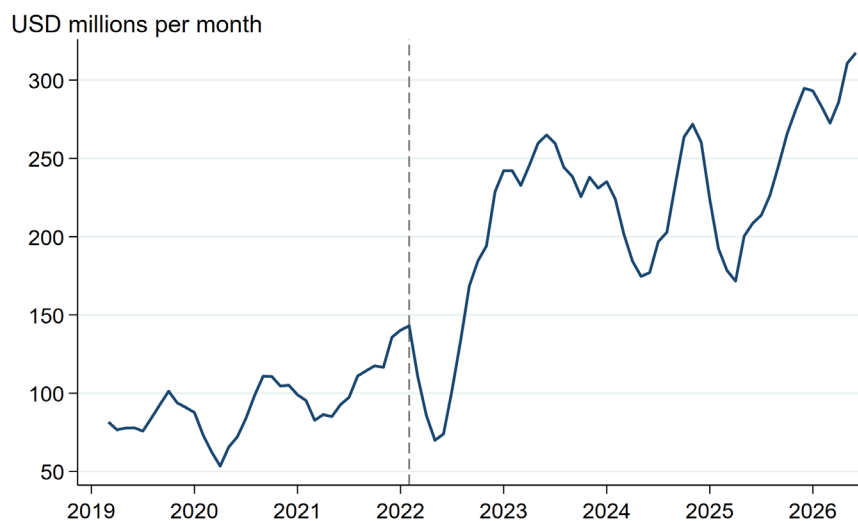


Figure 6. China's drone-component exports to Russia, 2019–2026.

Notes: 3-month moving average across 37 high-confidence drone-component HS6 codes; component-level detail is shown in Appendix Figure A6.

Source: Trade Data Monitor; authors' calculations.

This 37-code list overlaps with, but is not the same as, the drone and battlefield-electronics row of Figure 5, which is why the two baselines

differ.⁵ The jump after the invasion was almost immediate, and a new surge began in 2025 as Russia scaled up FPV-drone production (Bloomberg 2026). Most of these items are commercial electronics outside any formal control list, and existing export-control enforcement therefore does not touch them.

Sanctions-circumvention support

Direct exports are only part of the picture: restricted Western and Chinese goods also reach Russia indirectly, through third countries and intermediaries inside China. Transshipment from China through third countries does not currently look like a large problem, which is unsurprising given the latitude China has had in shipping directly to Russia.⁶ This channel is nonetheless worth monitoring, because re-routing is the natural response to pressure on direct exports.

A second possibility is that Western-made components enter China and leave again for Russia. Re-export requires that, for a given product code, China's imports and its exports to Russia both step up after the invasion. Mostly they do not: 52 of the 85 core dual-use codes, accounting for 57 percent of the Russia-bound value, show exports to Russia surging while imports stay flat. However, twelve high-technology codes worth about USD 50 million a month fit the full re-export profile: navigation and avionics instruments, radar, aircraft and drone parts, data-processing units, semiconductors and the equipment that makes them.

China is therefore overwhelmingly a producer rather than a conduit for these goods: the twelve re-export codes are under a tenth of what the 85 core codes send to Russia. The exception is confined to codes China is itself a net importer of, buying more from the world than it sells and often by a wide margin (e.g., about twenty times more for semiconductor-manufacturing machines).

Small value does not mean small importance, however: these are among the items Russia can least easily substitute, much as the highest-concern CHPL tier (advanced integrated circuits) amounts to only about USD 10 million a month. Several of the twelve are also priced well below the unit value of China's own imports of the same code, so the declared values may understate what is moving. The Appendix describes the full set of tests.

Over four years of tightening Russia-focused sanctions have raised Russia's costs but have not closed the supply lines that matter, because those supply lines now run through a country the sanctions regime barely touches.

⁵ Appendix Figure A6 breaks this series down into specific components, e.g., flight controllers, electronic speed controllers, first-person-view (FPV) goggles, lithium-polymer (LiPo) batteries and chargers, and brushless motors.

⁶ We examined six frequently cited hub jurisdictions (Armenia, Georgia, Hong Kong, Kazakhstan, Kyrgyzstan, and Türkiye) for signs that Chinese dual-use goods are re-routed to Russia. The flows are small relative to China's direct exports, the 2022–2023 surges have largely reversed, and the goods involved were mostly not of Chinese origin. Details are in the Appendix (Figure A7).

The case for pressuring China

The evidence above points to a simple strategic conclusion: because Russia's resilience runs through China, marginal pressure on the China channel can constrain Russia substantially more than the same effort spent on Russia-only measures. Over four years of tightening Russia-focused sanctions have raised Russia's costs but have not closed the supply lines that matter, because those supply lines now run through a country the sanctions regime barely touches.

One objection is that China is large, integrated, and hard to coerce. But reluctance to confront China ignores the asymmetric stakes. For China, support to Russia is instrumental: it ties down Western resources, secures discounted energy, and keeps a friendly government in the Kremlin. For Europe, the outcome of the war is close to existential: it determines whether the continent faces a rearmed, revisionist Russia for a generation. When one side values the outcome instrumentally and the other existentially, the side with more at stake should be willing to pay more. Inaction also has a price: every month the China channel stays open lengthens the war, adds to Ukraine's human losses and Europe's fiscal burden, and deepens the precedent that arming an aggressor is costless.

China's size and integration have another implication: they make it unusually able to stop these flows if it chooses. China has a centralized customs administration, a comprehensive export-control law, decisive influence over its banks and largest firms, and a record of enforcing the controls it cares about. When Beijing restricted rare-earth magnet exports in April 2025, shipments fell by about three-quarters within two months and forced several global carmakers to pause production (Reuters 2025). By contrast, China's own export controls on drone components and on civilian drones destined for military use, in force since September 2024 (MOFCOM 2024), did not prevent the 2025 surge documented above. The difference between the two episodes is not administrative capacity but political will, and that is precisely what European inducements and pressure should target.

The economic stake for China is small. Exports of the 85 core dual-use codes, the goods that matter most to Russia's war effort, came to about USD 6 billion in 2025, 6 percent of China's exports to Russia and less than 0.2 percent of its exports to the world. Even the EU's much broader dual-use list amounts to about USD 30 billion, under 1 percent of Chinese exports. The oil discount is similarly minor for Beijing. At the 2025 discount of about USD 5 per barrel on some 2 million barrels a day, China saved roughly USD 4 billion, about 1 percent of its USD 300 billion crude-import bill and 0.15 percent of its total imports. Neither is a stake Beijing should rationally defend at the cost of access to the European market, whose value we turn to next.

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China exported about USD 560 billion of goods to the EU in 2025, making the EU China's most valuable single export destination among the markets it can still count on, by a wide margin. The leverage is concentrated: Germany (USD 118 billion), the Netherlands (USD 94 billion), Italy, France, Spain, and Poland together account for over 70 percent (Figure 7). The reverse flow is large too: China imported about USD 268 billion of goods from the EU in 2025, with Germany alone accounting for USD 93 billion, two and a half times as much as France, the next largest exporter.

Europe thus holds considerable leverage over China through market access. Would pressure be worth its price? The relevant test is not whether a measure eliminates Chinese support but whether it maximizes the gap between the cost imposed on Russia's war effort and the cost incurred at home (Spiro 2023). By that standard, even a partial reduction in Chinese support is worth it. Closing or even constricting the drone-component, machine-tool, and microelectronics channels documented above would force Russia into more expensive, slower, lower-quality procurement just as its fiscal buffers are draining. And China has already shown that its major banks and firms will curtail Russia-related business when the cost of losing Western market access becomes concrete (Bloomberg 2024; Reuters 2024). This is further evidence that China's support for Russia is grounded in self-interest, not principle.

To counteract the China channel, policymakers should combine genuine, valuable inducements with credible costs, sequenced so that compliance is always the preferable path for Beijing.

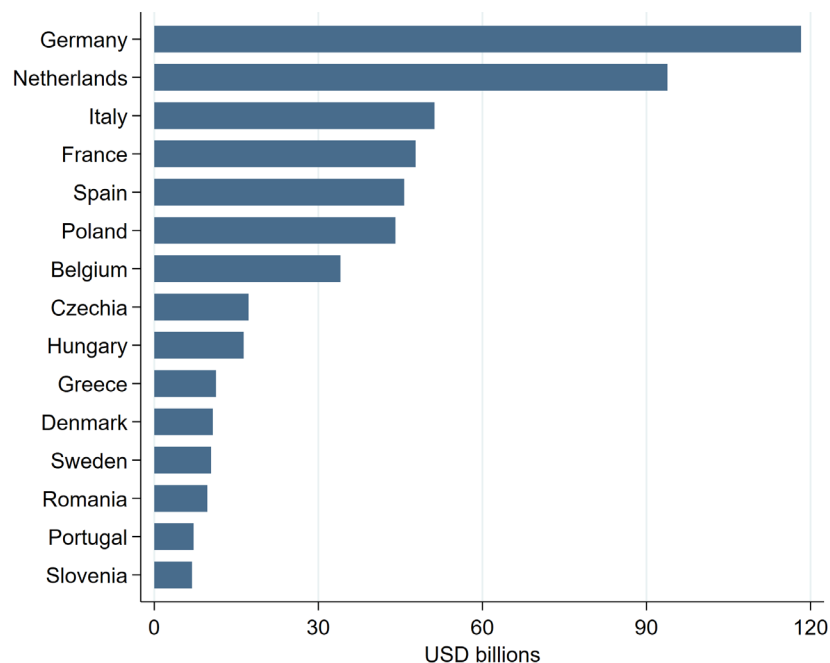


Figure 7. China's exports to EU member states (top 15, 2025).

Notes: China-reported exports to each member state, 2025. Netherlands and Belgium figures partly reflect port-of-entry effects.

Source: Trade Data Monitor; authors' calculations.

Policy recommendations: inducements and pressure

To counteract the China channel, policymakers should combine genuine, valuable inducements with credible costs, sequenced so that compliance is always the preferable path for Beijing. Neither element works alone: carrots without sticks invite pocketing concessions; sticks without carrots invite escalation and give Beijing no face-saving exit.

Overarching design principles

Conditionality and verification. Every benefit and penalty should be tied to measurable, monitored changes in China's exports to Russia, directly and via transshipment hubs. This is feasible: for example, the analysis in this brief is built entirely from commercially available monthly customs data, and a similar pipeline can track compliance for specific product groups and routes in near-real time. The monitoring problem is also narrower than it appears: in 2025 and the first half of 2026, ten HS6 product codes accounted for about 90 percent of the drone-component flow documented above, and just three for two-thirds. A standing EU unit publishing regular compliance assessments would make the conditionality more credible still.

Sequencing and reversibility. Start with the highest-impact military channels (drone components, machine tools, microelectronics), where the case is strongest and the argument hardest for Beijing to contest. Escalate or relax on verified compliance, keeping each step reversible so neither side faces an all-or-nothing choice.

Coordination. Align measures with the United States, the United Kingdom, Japan, South Korea, and other partners. Unilateral EU action is more easily circumvented, since flows could re-route through whichever member holds out, and more likely to invite targeted retaliation. A unified front also raises the value of the inducements: collective market access is a bigger prize than any single market.

Resilience to adaptation. The objection that China will adapt by shifting routes, relabeling goods, and using new intermediaries argues for better design, not inaction. Adaptation is costly: re-routing raises prices and delays, and those costs fall on Russia's procurement system. Enforcement pressure has already worked once: after Western governments targeted third-country routes in 2023, Türkiye's exports of core dual-use goods to Russia fell by more than 80 percent from their peak and Armenia's by about three-quarters, and China's largest banks curtailed Russia-related business as soon as US secondary sanctions became a concrete threat in 2024. The task now is to make that pressure systematic rather than *ad hoc*. Policymakers already

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accept permanent adaptive contests in cybersecurity and financial crime; the same attitude should be adopted here.

Inducements

- **Conditional market access.** Phased reduction or suspension of EU tariffs and trade barriers, for example the anti-subsidy duties on Chinese electric vehicles (EVs), released in tranches tied to verified declines in Chinese exports of high-priority dual-use items to Russia.
- **Investment and procurement access.** Easing of investment-screening and public-procurement restrictions for Chinese firms that demonstrably exit the Russia supply chain.
- **Technology and standards cooperation.** Limited, reversible cooperation in non-sensitive sectors, offered as a reward for verified compliance. Strategic infrastructure, advanced semiconductors, and technologies with direct defense uses should remain off the table.
- **Diplomatic standing.** A recognized, constructive role for China in any post-war settlement and reconstruction, contingent on ending military-relevant support.
- **Sequenced sanctions relief.** A credible, staged path to de-listing Chinese entities once their enabling activity verifiably ends.

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Costs and pressure

- **Secondary sanctions.** Target Chinese firms, banks, and trading intermediaries (including in Hong Kong) supplying Russia's defense-industrial base, prioritizing the drone-component, machine-tool, and microelectronics channels.
- **Tighter, better-enforced export controls on dual-use goods.** Enforcement should shift toward end-use verification and the Chinese and Hong Kong trading intermediaries and shell companies through which restricted goods reach Russia directly. Third-country routes, currently small, should be covered by the standing monitoring described above so that re-routing is caught early if pressure on the direct channel succeeds.
- **Financial sanctions.** Target the institutions that make yuan-settled sanctions evasion work: the small regional Chinese banks that still clear Russian trade, the payment agents and trading companies that settle sensitive-goods purchases on importers' behalf, and the cross-border clearing platforms that connect them. The January 2025 US action shows what this looks like in practice: the Treasury designated fifteen Russian and Chinese companies set up as regional clearing platforms to process payments for sensitive goods, freezing their US-reachable assets

and exposing any bank that still serves them to secondary sanctions (US Department of the Treasury 2025). An EU counterpart would list the same intermediaries, cutting them off from euro clearing and from correspondent relationships with European banks. It would also raise the cost of business with Russia for every Chinese bank not yet drawn in.

Managing risks of confronting China

Retaliation risk

Beijing has already shown its willingness to hit back. In July 2026, China placed fourteen EU defense and aerospace firms under dual-use export controls, citing the EU's next sanctions package (SCMP 2026). Those controls are also a reminder that Europe's own rearmament supply chains need screening for dependence on Chinese inputs.

China also controls the rare earths and critical minerals on which Europe's rearmament partly depends. That exposure is real but concentrated and therefore manageable: in 2025, Germany's imports of rare-earth compounds and magnets from China (about USD 580 million) were about five times those of the next member state, and the sums involved are small relative to the stakes. The right response is to treat mineral diversification and stockpiling as an urgent investment. Heavy-handed pressure could push Beijing closer to Moscow rather than away, which is why the inducement track and a permanently open off-ramp are integral to the design.

The threat of retaliation should not prevent policy. Chinese supply lines are sustaining a war of aggression on the EU's border and equipping the power most likely to test NATO next. This is an urgent security problem, not a routine trade dispute, and the costs of countering it are bounded while those of a longer war compound every month. A Europe that does not act because Beijing might object has already conceded the leverage it holds.

Internal cohesion

Europe runs a large goods deficit with China (about USD 290 billion in 2025 on China-reported data). In aggregate that strengthens Europe's hand, since China needs the European market more than Europe needs Chinese goods. But member states differ in exposure and outlook. Beijing may exploit those divisions, as it has before.

The exposure data suggest where the tension lies. Germany dominates both import exposure and exports to China and faces the largest retaliation risk. Hungary and Slovakia host concentrated Chinese EV and battery investment (CATL's battery plant in Debrecen and BYD's car plant in Szeged; the Gotion-InoBat battery plant in Šurany and

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Volvo Cars' Geely-controlled EV plant near Košice).⁷ That exposure is not purely a risk, however. These plants loom larger in the host economies than the raw rankings show, but they are also Beijing's main route into the EU market for tariff-free EVs and batteries, and their permits, subsidies, and operating conditions lie with the host governments. Budapest and Bratislava therefore hold more leverage over China than their size suggests, and the EU should treat that leverage as a shared asset rather than let it be used to block a common position. Should economic harm come to pass, explicit within-EU compensation such as transitional support from common funds for member states bearing disproportionate retaliation costs (analogous to the Brexit Adjustment Reserve) would be a small price for unity. That negotiation should begin now.

Conclusion

More than four years into Russia's full-scale war against Ukraine, the evidence is hard to argue with. China has become the decisive external enabler of Russia's aggression: its largest customer, its dominant supplier of militarily relevant goods, and the hub of its sanctions-evasion architecture. About 40 percent of Russia's trade now runs through a single partner. That concentration is Russia's vulnerability and Europe's opportunity.

The EU holds large, underused leverage: a USD 560 billion market Beijing values far more than the Kremlin's war aims. A calibrated combination of conditional market access and credible costs to change China's calculus is an obvious next step. The alternative is not a safer status quo; it is a war prolonged by Chinese supply lines, a European security environment deteriorating on both its eastern and systemic flanks, and a demonstration that enabling aggression is costless. As with sanctions on Russia itself, the binding constraint is not feasibility but political will: the leverage and the monitoring tools exist, and the costs of using them are bounded, while the costs of not using them compound every month the war continues.

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⁷ Belgium's headline EV-import exposure, the EU's largest at about USD 5 billion in 2025, largely reflects its role as a port of entry rather than domestic consumption.

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Appendix

Unless otherwise indicated, all figures are the authors' calculations from Trade Data Monitor (TDM) monthly customs data. Indexed comparisons use the 2019–2021 monthly average as baseline; pre/post-invasion averages compare January 2019–January 2022 with February 2022 onward.

Mirror-data validation. Because Russia stopped publishing detailed customs statistics after the invasion, its total trade is reconstructed from “mirror” data (the reported trade of 113–125 partner countries with Russia, depending on the year). In 2019–2021, when Russia's own statistics permit a direct check, the mirror estimates track Russia-reported totals within 3–14 percent, capturing 86–87 percent of Russia's reported imports and 91–97 percent of its reported exports (Figure A1). The gaps reflect non-reporting countries and valuation conventions (partners report exports free-on-board, while Russia reports imports inclusive of freight and insurance). Russia-reported benchmarks are from the World Bank's World Integrated Trade Solution (WITS) database (World Bank 2026).

Because the missing trade is by construction non-Chinese, the reconstruction makes Russia's totals a lower bound and China's share of them a modest overestimate, by between half a percentage point (exports, 2021) and almost four percentage points (imports, 2021) in the pre-invasion years. Because the overstatement scales with China's share, which has since more than doubled, the correction for 2025 is larger than this range, but the brief's headline conclusion is unaffected: even scaled by pre-invasion coverage ratios, China's share of Russia's goods trade in 2025 would be about 36–38 percent rather than 40 percent.

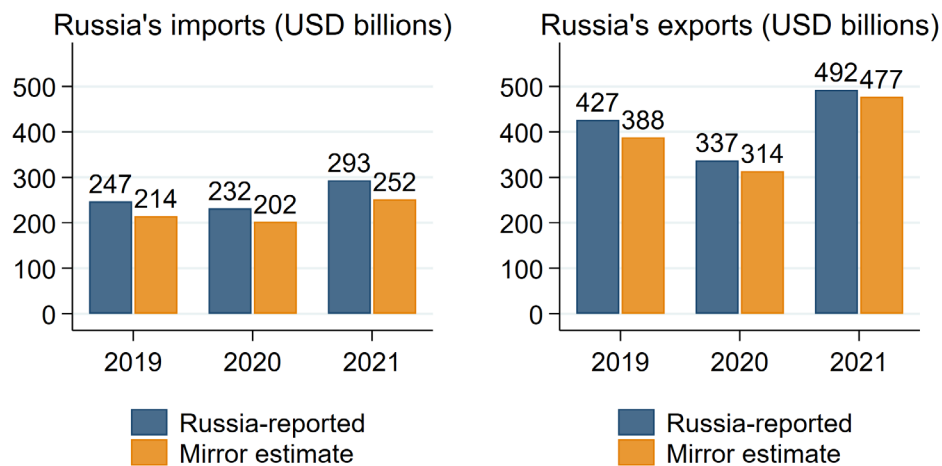


Figure A1. Mirror estimates versus Russia-reported trade totals, 2019–2021.

Notes: Russia-reported totals are customs-basis values from World Bank WITS (exports valued free on board, imports inclusive of cost, insurance, and freight). Mirror estimates sum the reported trade of the 120–122 partner countries covered by TDM in each year.

Source: Trade Data Monitor; World Bank WITS; authors' calculations.

Currency of denomination. Customs values are recorded in US dollars, so dollar swings could in principle affect measured trends. Figure A2 re-denominates the headline bilateral-trade index in yuan and in rubles, using monthly average exchange rates (FRED series

EXCHUS and CCUSMA02RUM618N). The post-invasion rise is similar in yuan and larger still in rubles: over the twelve months to June 2026 the index stands at 207 in dollars, 215 in yuan and 231 in rubles. The ruble series rises fastest because the ruble depreciated against both the dollar and the yuan, the currency in which most of this trade is now settled; a yuan bought 10.4 rubles on average in 2019–2021 and 11.7 rubles in 2025.

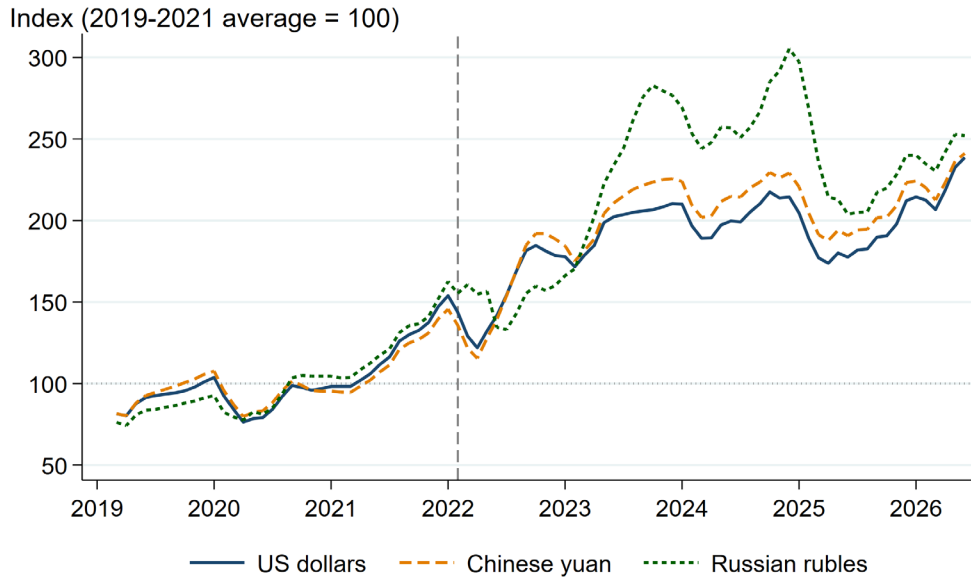


Figure A2. China–Russia bilateral trade indexed in US dollars, Chinese yuan and Russian rubles.

Notes: 3-month moving averages of monthly bilateral goods trade, each indexed to its own 2019–2021 average = 100. Yuan and ruble values convert monthly dollar values at the monthly average CNY/USD and RUB/USD rates (FRED, series EXCHUS and CCUSMA02RUM618N).

Source: Trade Data Monitor; Federal Reserve Bank of St. Louis; authors' calculations.

Exports and imports separately. Figure 1 combines the two directions of trade; Figure A3 separates them. China's exports to Russia rose from USD 50–67 billion a year in 2019–2021 to USD 104–115 billion a year in 2023–2025. China's imports from Russia rose from USD 58–80 billion to USD 124–130 billion over the same two periods. The lower panel indexes each series to its own 2019–2021 average. Over the twelve months to June 2026 both series stood at about twice their 2019–2021 averages: an index of 207 for China's exports to Russia and 206 for its imports from Russia. The spring-2022 dip discussed in the text is confined to China's exports to Russia; its imports from Russia, dominated by energy, rose in this period.

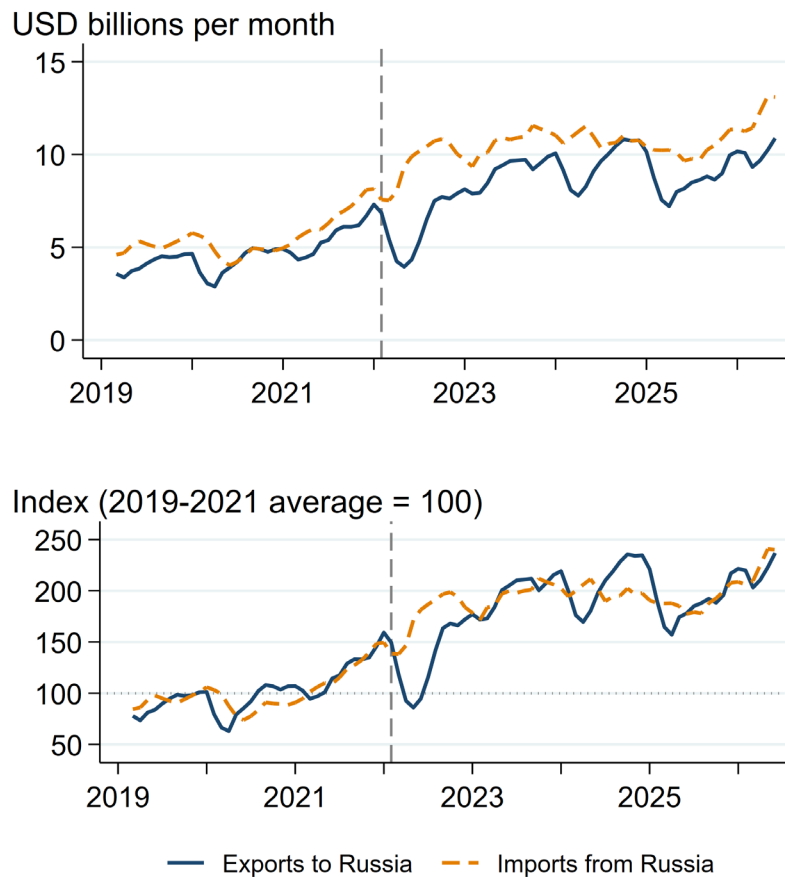


Figure A3. China's exports to Russia and imports from Russia, 2019–2026.

Notes: 3-month moving averages of China's monthly goods exports to Russia and imports from Russia, in USD billions (upper panel) and indexed to each series' own 2019–2021 average = 100 (lower panel). The dashed vertical line marks the February 2022 full-scale invasion.

Source: Trade Data Monitor; authors' calculations.

Crude-oil unit values and Russia's discount. Figure 3 is built from China's monthly customs records of crude-oil imports (HS 270900) by partner. For each month we divide import value by quantity to obtain a unit value in USD per barrel, separately for Russia and for all other suppliers combined. Chinese customs declared crude quantities in kilograms through December 2023 and in barrels from January 2024; we convert the kilogram figures to barrels at the conventional factor of 7.33 barrels per tonne, so the series is in barrels throughout. The discount is the percentage by which the Russian unit value falls below the non-Russian unit value in the same month; because the benchmark is China's own basket of other suppliers rather than Brent or Urals quotations, the discount measures the price concession Russian sellers make in the Chinese market specifically. Differences in crude grade between Russian and other suppliers could in principle contribute to the gap, but the gap was within about one percentage point of zero in each pre-invasion year (2019–2021), so the post-invasion discount is very unlikely to reflect grade composition.

Fiscal cost of the discount. The back-of-the-envelope estimate in the text combines three inputs. First, Vakulenko (2026) uses the Finance Ministry's monthly revenue data for 2018–

2025 to show that the state's take from oil (the extraction tax, the profit-based tax on additional income, and export duties, net of the refining subsidy) is well approximated by 58.4 percent of the Urals price above USD 13.5 per barrel. In other words, each dollar of discount reduces tax revenue by about 58 cents. Second, China's 2025 imports of Russian crude in our data averaged 2.04 million barrels per day at USD 66.9 per barrel, against USD 72.1 for China's other suppliers. A 10 percent discount is therefore USD 7.2 per barrel, the tax loss USD 4.2 per barrel, and the annual loss on the Chinese volume USD 3.1 billion. Third, for scale, Russia's crude exports averaged about 4.73 million barrels per day in 2025 (Energy Intelligence 2025) and its federal oil and gas revenue was RUB 8.48 trillion (Meduza 2026, citing the Finance Ministry), about USD 101 billion at the 2025 average exchange rate of 84 rubles per dollar. Applying the 10 percent discount to all crude exports gives a loss of USD 7.2 billion a year, about 7 percent of oil and gas revenue. The actual 2025 discount in our data (7.2 percent, USD 5.2 per barrel) implies a tax loss of about USD 2.3 billion on sales to China alone.

Two caveats apply. The tax formulas use an official Urals reference price that, since 2023, may not fall more than a fixed amount below Brent (USD 20 per barrel when introduced, scheduled to narrow in later years). When market discounts exceed that cap the excess is borne by the oil companies rather than the budget, so the estimate is an upper bound on the direct budget effect, the remainder falling on company profits. The second caveat is that the discount measured here is relative to China's other suppliers, which is not the quantity the tax formula uses. The level of the reference price does not matter for the estimate: because the state takes a constant share of the price above a fixed threshold, the threshold cancels when the formula is applied to the actual and the counterfactual price, leaving only the size of the price gap and the volume. What matters is whether the cap binds. Measured against Brent, Russian crude landed in China sold USD 4.9 per barrel below the benchmark in 2023, USD 2.0 in 2024 and USD 1.3 in 2025, in each case well inside the statutory maximum discount, suggesting that over those years the budget rather than the oil companies bore the concession. That comparison is indicative rather than exact, because Chinese import unit values are delivered prices that include freight to Asia while the tax formula's Urals price is quoted at Russian ports; netting out freight would widen the implied discount and could bring it close to the cap in the weakest months.

The HS 901380 reporting artifact. China's reported exports to Russia under HS 901380 ("optical devices and instruments, not elsewhere specified") collapsed from USD 54 million in December 2021 to USD 1.5 million in January 2022, one month before the invasion, and never recovered (Figure A4). The HS2017–HS2022 concordance shows the six-digit code itself surviving the 2022 nomenclature revision, but its scope did not: HS2022 created a new heading, 8524, for flat panel display modules and moved them out of HS Chapter 90 (optical, photographic, measuring and medical instruments, where this code is classified). Those modules accounted for most of the trade previously reported under this code. The break is therefore an international reclassification rather than a fall in trade or a Russia-specific reporting change: China's reported exports under this code fell by 97 percent or more to every destination in January 2022, and its Chapter 90 exports to the world fell 28.5 percent in the same month. Because the break predates the invasion and affects only this code, all Tier 3B aggregates in this brief exclude HS 901380. Including it would inflate the tier's pre-invasion base (USD 40 million rather than USD 2.5 million per month) and turn its post-invasion growth into an artificial decline.

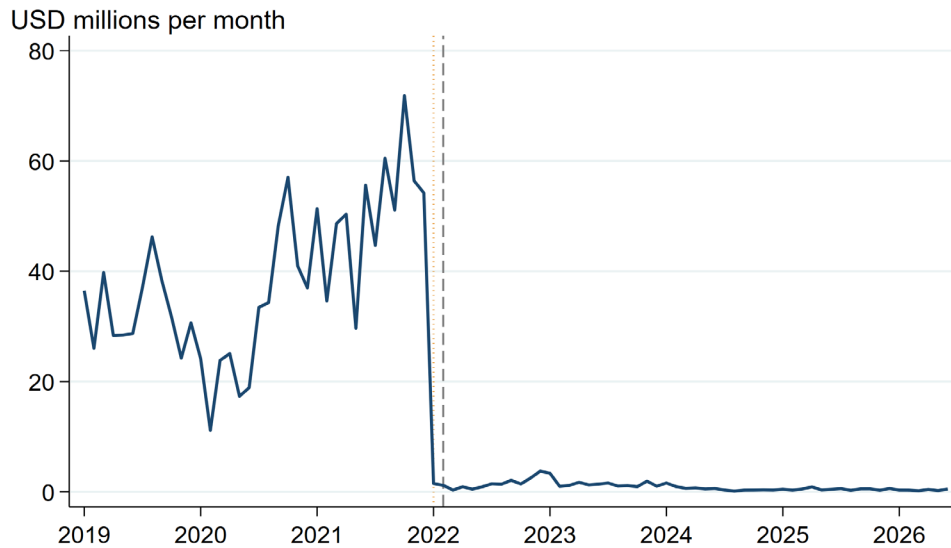


Figure A4. China's exports to Russia of HS 901380 (optical devices, n.e.s.), 2019–2026.

Notes: Monthly values. The orange dotted line marks January 2022, when the series collapses; the gray dashed line marks the February 2022 invasion.

Source: Trade Data Monitor; authors' calculations.

Identifying drone components in trade data. Many parts commonly used in small first-person-view (FPV) drones (motors, propellers, flight controllers, cameras, batteries, radio transmitters, and similar components) appear on neither the CHPL priority list nor the EU's dual-use control list. We therefore identified them independently, using ordinary customs trade-classification codes.

First, we specified about two dozen physical components that make up a typical FPV drone, based on their documented battlefield use. Each component was then matched to the international customs codes whose official descriptions most closely correspond to it (for example, “brushless motor” to the categories covering small electric motors, or “flight controller” to categories covering navigational instruments). Because one component can correspond to more than one customs code, and one code can cover several components, each match was scored for how closely the code's official description matched the component. Only the highest-confidence matches were retained. One code was added by hand rather than by this procedure: optical fibre cable (HS 854470). Fibre-guided FPV drones, which are immune to radio jamming and have been fielded in growing numbers since 2024, spool out physical fibre on every sortie, so the cable is a drone consumable that no description-based match to a drone part would have identified. The resulting list contains 37 HS6 codes.

Increases are not simply part of a general boom in Chinese exports. In a difference-in-differences design comparing China's CHPL exports to Russia against the same exports to eight comparable non-sanctioned emerging economies (Kazakhstan, Türkiye, Brazil, India, Vietnam, Indonesia, Mexico, and South Africa), Russia's imports show no differential trend before the invasion and then rise sharply and persistently relative to the comparators immediately after it: a differential increase of about 0.86 log points (135 percent) that remains highly significant four years on (Figure A5a).

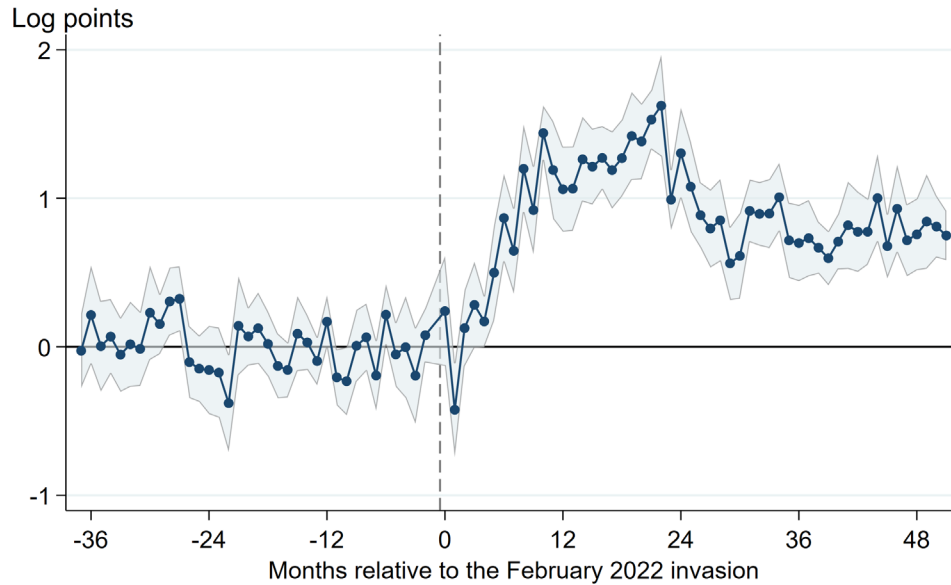


Figure A5a. Difference-in-differences: China's CHPL exports to Russia versus comparator countries.

Notes: Event-study coefficients from a two-way fixed-effects regression of the log of one plus monthly export value on product-country-pair and year-month fixed effects; treated = Russia, control = Kazakhstan, Türkiye, Brazil, India, Vietnam, Indonesia, Mexico, and South Africa. The coefficient path is normalized so that its pre-invasion average equals zero. Shading shows 95% confidence intervals; standard errors clustered by country and by product.

Source: Trade Data Monitor; authors' calculations.

A parallel design comparing dual-use against non-dual-use goods within China's exports to Russia confirms that growth is substantially larger for militarily relevant products (a differential increase of about 63 percent, Figure A5b).

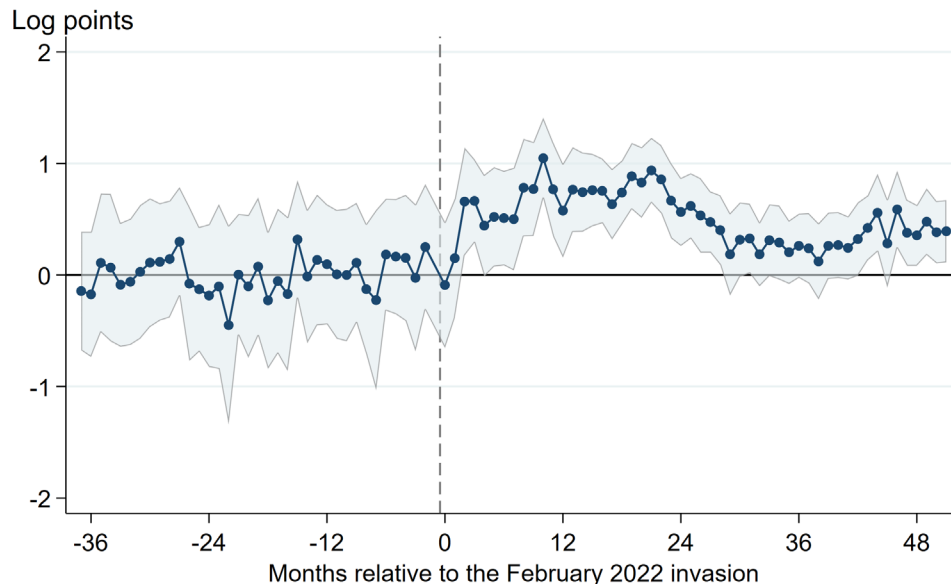


Figure A5b. Difference-in-differences: China's dual-use versus non-dual-use exports to Russia.

Notes: Dual-use goods are defined according to the EU classification EU Dual-Use Regulation Annex I control list, 2024. Event-study coefficients from a two-way fixed-effects regression of the log of one plus monthly export value on product and year-month fixed effects; treated = dual-use products, control = non-dual-use products, both within China's exports to

Russia. The coefficient path is normalized so that its pre-invasion average equals zero. Shading shows 95% confidence intervals; standard errors clustered by product.

Source: Trade Data Monitor; authors' calculations.

Finally, the same comparator-country design applied to drone-related components shows China's drone-component exports to Russia rising about 44 percent more than its exports of the same goods to the comparators (Figure A5c).

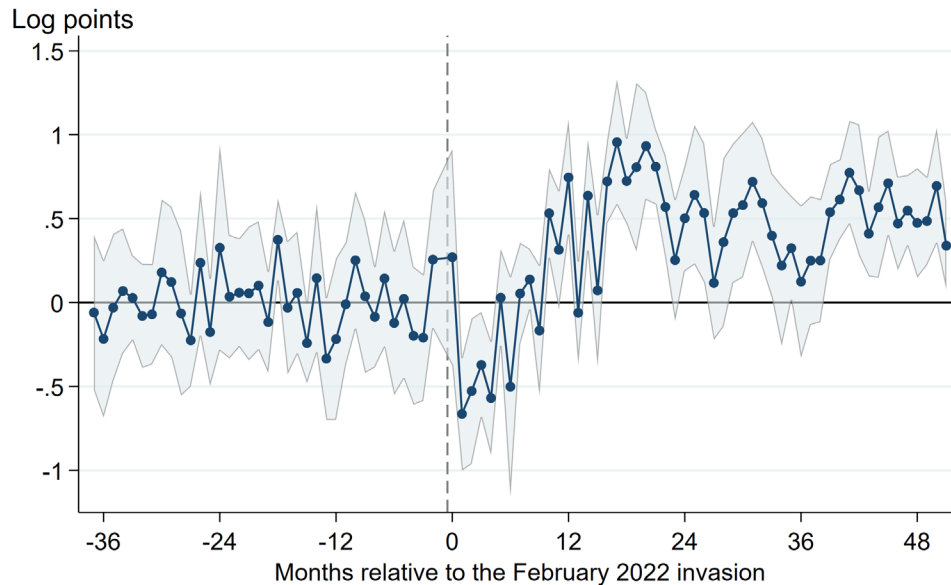


Figure A5c. Difference-in-differences: China's drone component exports to Russia versus comparator countries.

Notes: The list of HS6 codes for drone production was determined according to the methodology described in this appendix. Event-study coefficients from a two-way fixed-effects regression of the log of one plus monthly export value on product-country-pair and year-month fixed effects; treated = Russia, control = Kazakhstan, Türkiye, Brazil, India, Vietnam, Indonesia, Mexico, and South Africa. The coefficient path is normalized so that its pre-invasion average equals zero. Shading shows 95% confidence intervals; standard errors clustered by country and by product. The comparator-country panel covers the 36 high-confidence codes for which comparator-country data were collected; optical fibre cable (HS 854470) is not among them, so this figure is based on one code fewer than Figures 6 and A6.

Source: Trade Data Monitor; authors' calculations.

Drone-component detail. Figure A6 shows the largest drone-component groups by cumulative export value, each summed over its own high-confidence HS6 codes. Codes shared by more than one component are counted under each component. Electronic speed controllers and LiPo balance chargers are listed as separate components in the underlying mapping, but both match the same two customs codes (HS 850440 and 850490), so the trade data cannot tell them apart; they are shown as one series.

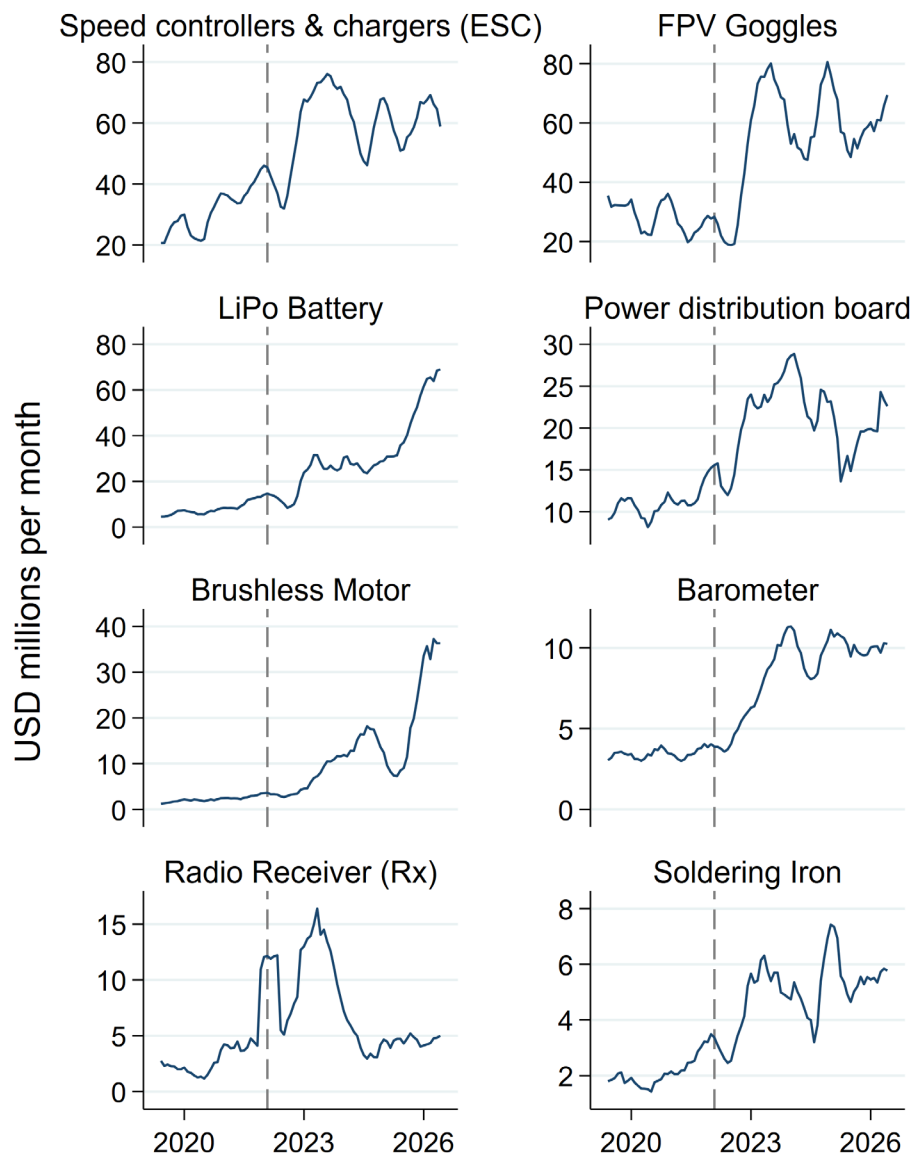


Figure A6. China's drone-component exports to Russia by component group.

Notes: 6-month moving averages; y-axis scales differ by panel. High-confidence HS6 matches only; HS6 codes are broad commodity categories, so levels are upper bounds on drone-specific content.

Source: Trade Data Monitor; authors' calculations.

Transshipment through third countries. Restricted goods can reach Russia indirectly: a third country imports them from China and re-exports them to Russia. For six frequently cited hubs that report to TDM (Armenia, Georgia, Hong Kong, Kazakhstan, Kyrgyzstan, and Türkiye; the UAE does not report), Figure A7 plots each hub's own-reported imports of the 85 core dual-use codes (defined in the note to Figure 5) from China alongside its exports of the same codes to Russia.⁸

Transshipment of Chinese goods should appear as a parallel rise in both series. Four hubs (Armenia, Kazakhstan, Kyrgyzstan, and Türkiye) show a sharp rise in exports to Russia in

⁸ Georgia filed its customs data under the 2017 nomenclature until 2026, so its transshipment leg may be undercounted.

the year after the invasion, to peaks between about 14 times (Türkiye) and 120 times (Armenia) their 2019–2021 averages, followed by a marked decline from 2023 as Western enforcement tightened. Hong Kong’s exports to Russia fell after the invasion, and Georgia’s remained negligible.

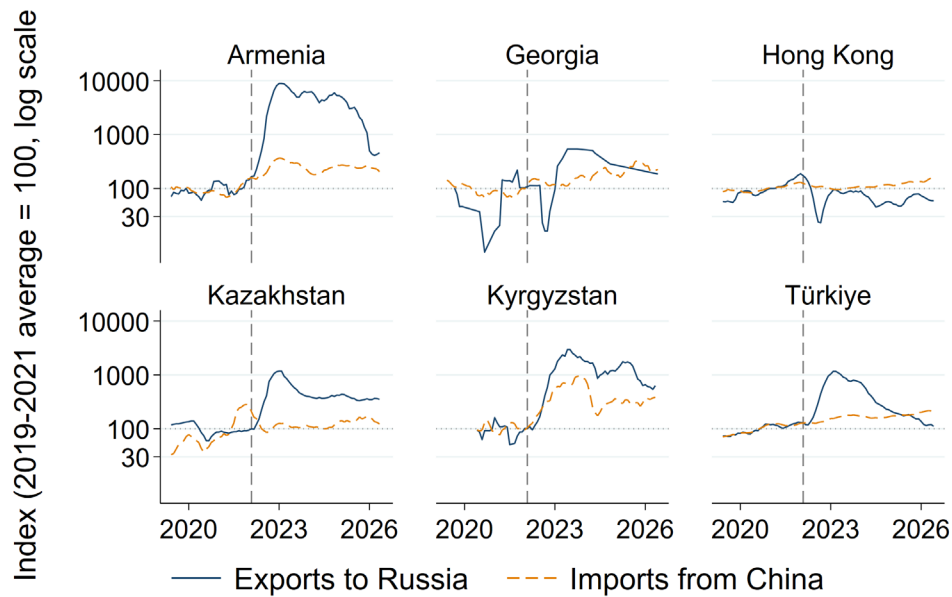


Figure A7. The transshipment signature: hub countries’ imports from China and exports to Russia, core dual-use codes.

Notes: 6-month moving averages of each series, indexed to its own 2019–2021 average = 100 and plotted on a log scale that is identical across panels.

Source: Trade Data Monitor, third-country-reported; authors’ calculations.

Three diagnostics test whether these flows are Chinese goods passing through; together they find no evidence of a systematic effort to route Chinese dual-use goods to Russia through third countries. First is scale: the six hubs’ combined exports of core dual-use goods to Russia rose by about USD 20 million per month after the invasion, less than a tenth of the USD 260 million per month increase in China’s direct exports of the same goods. Second is persistence: the surges have largely unwound under Western enforcement pressure, with Türkiye’s exports of these goods to Russia running at 14 percent of their 2022–2024 peak in 2025–2026 and Armenia’s at 26 percent. Third, and most telling, is product matching: genuine transshipment requires a hub’s imports of a code from China to rise alongside its exports of that code to Russia, and they do not.

Across the six hubs the product-level correlation between the two changes is 0.05 using the hubs’ own import reports and 0.17 using China’s reports of its exports to them, and no hub exceeds 0.38. At most 17 percent of Armenia’s export increase can be matched by same-code increases in its imports from China (10 percent on China’s reports), and Armenia’s surge is dominated by television sets and telecommunications equipment whose imports from China barely moved. Kazakhstan is the one hub where a sizeable flow persists, still about four times its pre-invasion level, and it too shows only a partial match between what it sends to Russia and what it buys from China. Kyrgyzstan shows the closest match but trades tiny amounts.

These flows therefore look more like opportunistic re-exporting of goods of mixed origin than a deliberate channel for Chinese dual-use goods. They nonetheless warrant standing

monitoring, because re-routing through Central Asia and the Caucasus is the obvious response to effective pressure on the direct channel; the EU should be ready to act quickly if the signature described here appears.

Transshipment through China. The tests above ask whether Chinese goods reach Russia through a third-country hub. A separate question is whether China is itself a hub: does it buy controlled items from advanced suppliers and ship them onward to Russia largely unaltered? A necessary (but not sufficient) condition is that, for a given product code, both China's imports and its exports to Russia increase after the invasion and move together. All flows are China-reported, monthly, January 2019 to July 2026 (one month beyond the rest of the brief, from a later data extract), for the 85 core dual-use codes. Pre- and post-invasion monthly means compare the months before February 2022 with February 2022 onward, and a "surge" is a post-invasion mean at least 30 percent above the pre-invasion mean. This test is somewhat underpowered: without more granular product codes, the data cannot separate a re-exported Western component from a Chinese-made substitute in the same category.

In the aggregate, what China buys did not move with what it exports to Russia. 52 of the 85 codes, accounting for 57 percent of the post-invasion Russia-bound value, are export-led: exports to Russia surged while imports stayed flat. Twenty codes accounting for 16 percent of the value show both imports and exports surging. Three codes, accounting for 25 percent, show the opposite: imports rising with no export surge. The remaining ten codes either show no surge in either direction (five codes, about 2 percent of the value) or carry negligible Russia-bound flows of under USD 50,000 a month (five codes).

Two findings point the other way. First, a distributed-lag regression of log exports to Russia on log imports from the advanced suppliers, with product and month fixed effects, shows a structural shift after the invasion. Before it, only the contemporaneous month of imports predicted Russia-bound exports and the one- to three-month lags were flat or negative; after it, all three lags are positive and significant, with a cumulative elasticity of about 0.33. Second, twelve codes fit the full fingerprint of re-export: China is a net importer of the code, both directions surged, and the share of its intake sent to Russia rose. They are navigational and aeronautical instruments (HS 901410, 901420 and 901480), radar apparatus (852610), parts of aircraft, helicopters and drones (880730), semiconductors and semiconductor-manufacturing equipment (854129, 854149, 854159, 854231, 848610 and 848620), and data-processing units (847180). Three of them price their Russia-bound sales close to the import unit value, the signature of pass-through; several price far below it, consistent either with under-invoicing or with a genuinely cheaper domestic substitute. The amounts are small: about USD 50 million a month between them, the largest USD 18 million and half of them below USD 1 million.

About Economists for Ukraine

Economists for Ukraine is a collective of economists and members of the global academic community dedicated to supporting Ukraine in response to Russia's invasion. The organization focuses on advancing policies that strengthen Ukraine's resilience, contribute to the cessation of hostilities, and support long-term reconstruction and economic stability. It operates as the think tank arm of the AI for Good Foundation, a global non-profit organization focused on leveraging technology to address major societal challenges.

The group brings together expertise across macroeconomics, finance, behavioral economics, environmental economics, governance, and game theory to produce policy-relevant analysis. Its work includes research publications, policy briefs, and collaboration with initiatives such as the International Working Group on Russian Sanctions, with the aim of informing effective economic and financial measures targeting the Russian economy.

In addition to analytical work, Economists for Ukraine contributes to practical recovery efforts. In coordination with the AI for Good Foundation, Ukrainian government institutions, and local partners, the organization supports initiatives addressing urgent humanitarian needs and longer-term reconstruction priorities.