

Three Corridors, Three Risk Channels: Black Sea, Malacca and Taiwan Strait

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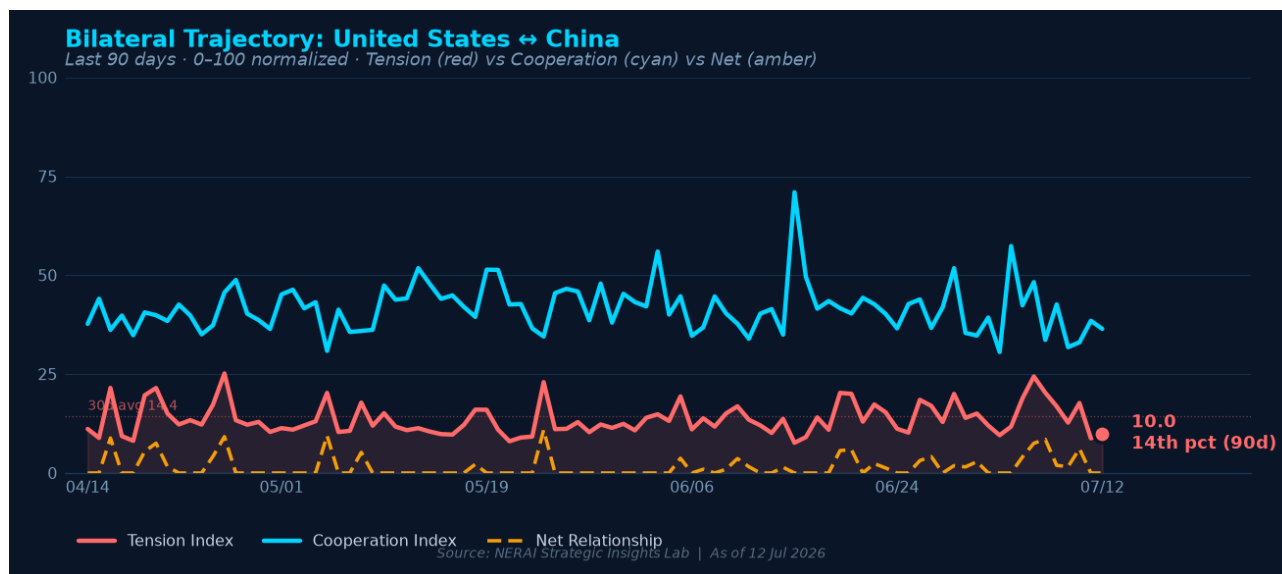
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Three Corridors, Three Risk Channels: Black Sea, Malacca and Taiwan Strait

Why contained freight pressure does not mean low commercial exposure

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EXECUTIVE SUMMARY — BOTTOM LINE UP FRONT



Bilateral Trajectory: United States ↔ China — last 90 days, 0–100 normalized (NERAI Strategic Insights Lab).

The absence of immediate freight-cost shocks across the Black Sea, Strait of Malacca and Taiwan Strait masks divergent risk-transmission channels that will reshape commercial exposure over the next 90 days (HIGH CONFIDENCE). While container and dry-bulk pressure indices remain in the low-to-medium 40s across all three corridors, each is transmitting risk through a distinct mechanism: the Black Sea through sanctions enforcement and shadow-fleet interdiction; Malacca through operational dependency on a high-visibility chokepoint with natural-hazard exposure; and the Taiwan Strait through strategic tail-risk tied to China's tariff posture, semiconductor supply chains and South China Sea tensions. Decision-makers who rely solely on freight-rate signals and port-incident counts will materially underestimate exposure. The critical period is the next 60–90 days, when enforcement actions, natural events or flashpoint signalling could trigger sudden repricing in insurance, compliance costs or supply-chain routing—long before freight rates reflect the shock.

KEY FINDINGS

- **[HIGH CONFIDENCE]** No immediate freight-cost shock does not mean no corridor risk. Black Sea container pressure stands at 46.1/100 and dry-bulk at 44.5/100; Malacca at 44.6/100 and 43.0/100; Taiwan Strait at 41.9/100 and 40.5/100—all in the low-to-medium range with no acute cost-rise signal. Yet each corridor carries material commercial exposure through non-price channels: sanctions and shadow-fleet enforcement (Black Sea), systemic chokepoint dependency (Malacca), and strategic tail-risk from tariff and flashpoint dynamics (Taiwan Strait).
- **[HIGH CONFIDENCE]** The Black Sea is the most sanctions-sensitive corridor of the three, with a Russia sanctions signal at 13.0/100, transit strained at -10.8%, and active re-export/circumvention corridors rated Severe (China/Hong Kong → Russia at 90/100, Armenia at 88/100, Kyrgyzstan at 86/100, UAE at 84/100).

The NERAI Russia Shadow-Fleet Enforcement Pressure Index stands at 45.0/100 (Moderate level, 13-week direction Falling), yet recent enforcement events—including the UK's 13 July cyber-network sanctions and documented penalties against firms breaching Russia sanctions—demonstrate that regulatory pressure remains live even as the composite index declines.

- **[MODERATE CONFIDENCE]** The Strait of Malacca presents a quiet-chokepoint paradox: operationally calm (transit -4.7%, escalation 5.4/100, zero port incidents) but systemically critical, with a news signal at 83.0/100—the highest of the three corridors—and natural-hazard exposure (active Red-level earthquake alerts in Indonesia). This corridor's risk lies not in current disruption but in its role as a non-substitutable chokepoint where even marginal degradation would cascade globally.
- **[HIGH CONFIDENCE]** The Taiwan Strait carries the largest strategic tail-risk despite normal current operations (transit +6.9%, escalation 5.4/100). China's tariff exposure includes Section 301 duties of 7.5–25% baseline plus targeted hikes (EVs +100%, solar +50%, semiconductors +50%), a sanctions signal at 32.0/100, and the South China Sea/Taiwan flashpoint overlay. The non-obvious insight: firms treating the Taiwan Strait as 'calm because transit is positive' are mispricing the probability-weighted downside of a 90-day scenario where semiconductor supply chains reroute and tariff enforcement tightens—a shock that would appear first in compliance costs and supply-chain lead times, not in spot freight rates.
- **[MODERATE CONFIDENCE]** Current risk-pricing in marine insurance and logistics contracting likely underweights non-freight transmission channels. NERAI's value proposition is to surface these channels—sanctions enforcement calendars, shadow-fleet interdiction intensity, natural-hazard watch zones, tariff-policy volatility—before they materialize as cost shocks. The evidence is the 45.9/100 escalation reading in the Black Sea and the Severe-rated circumvention corridors, which have not yet triggered widespread insurance repricing but will once enforcement actions accelerate.

BACKGROUND & CONTEXT

Maritime corridor risk assessment has historically centered on two indicators: freight-rate volatility and port-incident counts. This framework served adequately during the era of stable trade rules and predictable geopolitical alignments, when disruptions were predominantly operational (piracy, weather, labor strikes) rather than strategic. The current environment breaks that model. Sanctions regimes now span 25,844 restricted parties globally (OFAC SDN, BIS Entity List, State ITAR), with Russia accounting for 5,408 listings and China for 2,398. Re-export and circumvention corridors—China/Hong Kong to Russia, Armenia to Russia, UAE to Russia—operate at Severe intensity (84–90/100), creating compliance risk that does not register in spot freight indices but reshapes routing decisions, insurance underwriting and board-level risk appetite.

Simultaneously, natural-hazard exposure has intensified. Active Red-level earthquake alerts span Venezuela, Japan, Indonesia and Russia; tropical cyclone tracks intersect Guam, Northern Mariana Islands, Japan, Taiwan and China; regional drought signals affect Indonesia and surrounding areas. The Global Supply Chain Pressure Index (NY Fed GSCPI) stands at 1.769 sigma—93rd percentile of its historical distribution—indicating above-normal global pressure even absent acute corridor-specific shocks. Against this backdrop, the Black Sea, Strait of Malacca and Taiwan Strait each present a distinct risk profile: the Black Sea transmits risk through Russia-linked sanctions enforcement and shadow-fleet interdiction; Malacca through its role as a non-substitutable global chokepoint with natural-hazard sensitivity; and the Taiwan Strait through strategic tail-risk tied to China's tariff exposure, semiconductor centrality and South China Sea flashpoint dynamics.

ANALYSIS

The Interpretive Framework: Risk Transmission Beyond Freight

I read maritime corridor risk through the lens of asymmetric transmission channels—the mechanisms by which geopolitical, regulatory and natural-hazard shocks propagate into commercial costs before they appear in headline freight rates. This framework distinguishes between price-visible shocks (bunker surcharges, war-risk premiums, port congestion delays) and price-invisible shocks (sanctions compliance costs, insurance-policy exclusions, supply-chain lead-time extensions, board-level risk-appetite adjustments). The latter category is where corridor risk is currently concentrating across the Black Sea, Strait of Malacca and Taiwan Strait, and where conventional dashboards fail.

The NERAI data confirms this divergence. Container pressure across all three corridors sits in the 41.9–46.1/100 range; dry-bulk pressure in the 40.5–44.5/100 range. These are low-to-medium readings with no acute cost-rise signal. Yet the Black Sea's transit strain at -10.8%, its Russia sanctions signal at 13.0/100, and its Severe-rated circumvention corridors (China/Hong Kong → Russia at 90/100, Armenia at 88/100) indicate that compliance risk and enforcement intensity are running ahead of freight-rate repricing (HIGH CONFIDENCE). The Russia Shadow-Fleet Enforcement Pressure Index at 45.0/100 (Moderate level, 13-week Falling) reflects recent stabilization—Russian fossil-fuel revenue is estimated at €726 million per day with month-on-month growth of +2% (CREA, May 2026 estimate), and the ruble has depreciated 6.2% over four weeks to 76.44 USD/RUB—but the UK's 13 July sanctions on Russian cyber networks and documented enforcement actions (including penalties for breaching Russia sanctions) demonstrate that regulatory pressure remains an active transmission channel.

The Strait of Malacca presents a different puzzle. Transit deviation is minimal (-4.7%, within normal range), escalation stands at 5.4/100, and there are zero port incidents. Yet the news signal at 83.0/100 is the highest of the three corridors, and recent IMF PortWatch data shows Malacca transit at 224.5 vessels per day versus a baseline in the 230s—a marginal reduction that would be statistically insignificant in isolation but carries systemic importance given Malacca's role as a non-substitutable chokepoint. Natural-hazard exposure adds a second layer: active Red-level earthquake alerts in Indonesia and regional drought signals create tail scenarios where even brief operational degradation could cascade. The analytical question conventional frameworks miss is: what is the probability-weighted cost of a 7-day throughput reduction of 15–20%, and does current marine insurance pricing incorporate that tail? (MODERATE CONFIDENCE)

The Taiwan Strait is where strategic tail-risk dominates. Transit is positive (+6.9%), escalation low (5.4/100), and there are zero port incidents. Operationally, this corridor looks calm. Yet China's sanctions signal stands at 32.0/100, its tariff exposure includes Section 301 baseline duties of 7.5–25% plus targeted hikes (EVs +100%, solar +50%, semiconductors +50%, lithium-ion batteries +25%), and the South China Sea/Taiwan flashpoint remains active. The re-export corridor China/Hong Kong → Russia is rated Severe at 90/100, indicating that any intensification of U.S.-China enforcement would ripple through this route. The non-obvious insight: firms treating the Taiwan Strait as 'low-risk because transit is normal' are ignoring the strategic tail where a 60–90 day escalation scenario (triggered by a South China Sea incident, Taiwan military signaling, or tariff-enforcement acceleration) would disrupt semiconductor supply chains and trigger insurance exclusions long before it shows up in spot freight rates (HIGH CONFIDENCE).

Historical Analogues and Pattern Recognition

This corridor-risk divergence resembles three prior episodes. The 2022 Black Sea grain-corridor crisis saw freight rates spike only after weeks of insurance exclusions and flag-state withdrawals—compliance risk led price risk. The 2017 Qatar diplomatic blockade demonstrated that chokepoint-adjacent corridors experienced insurance repricing and routing shifts even when physical transit remained open. The 2023 China gallium/germanium export controls showed that strategic-material restrictions transmit through supply-chain lead times and compliance costs before they move commodity spot prices. In each case, decision-makers who waited for freight-rate signals to confirm the risk materially underestimated their exposure.

Policy-Maker Calculus — Beijing and the Taiwan Strait

Within Beijing, the strategic calculus hinges on whether China's leadership assesses that current tariff and sanctions exposure can be absorbed through circumvention corridors (China/Hong Kong → Russia at Severe 90/100) or whether it requires direct policy de-escalation. The NERAi 12-month forecast shows China's Military Clash index falling from 10/100 to 8/100 (Δ -2 points, -20%, FALLING) and Military Crisis from 21/100 to 9/100 (Δ -12 points, -56%, FALLING), suggesting baseline expectations of tactical de-escalation. Yet the Increasing Bilateral Relations index is also forecast to rise from 40/100 to 45/100 (Δ +5 points, +13%, RISING), indicating that any cooperation will remain limited and conditional. If Beijing calculates that semiconductor supply-chain leverage outweighs circumvention-route vulnerability, it may accept higher Taiwan Strait signaling risk to extract tariff concessions—a move that would elevate the corridor's strategic tail-risk within 60 days (MODERATE CONFIDENCE).

The Counter-Thesis: Why Freight Rates Might Still Lead

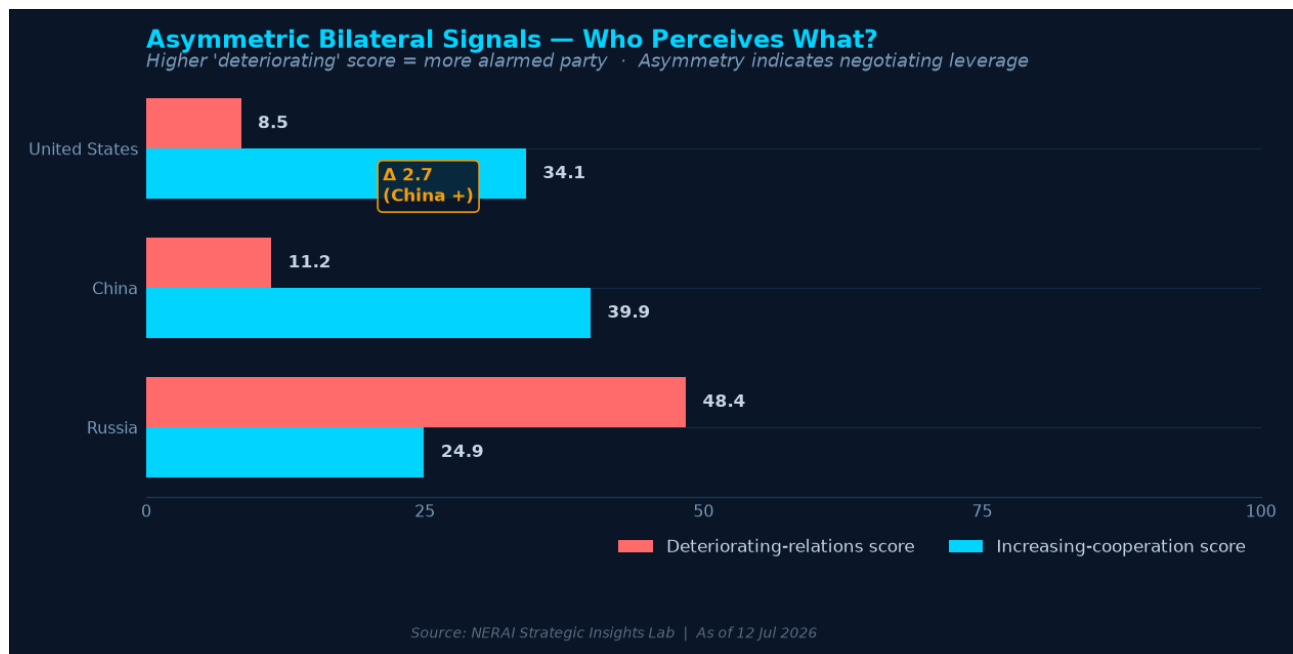
The strongest argument against my central thesis comes from market-efficiency proponents—for example, trade-policy analysts at institutions such as the Peterson Institute for International Economics and the Council on Foreign Relations—who would argue that freight rates and insurance premiums are forward-looking and will price corridor risk as soon as it becomes material. In this view, the absence of a freight shock in the Black Sea, Malacca and Taiwan Strait is itself evidence that market participants do not assess the sanctions, natural-hazard or strategic risks as imminent. If compliance costs or enforcement intensity were genuinely elevated, the argument goes, marine insurers would have already repriced war-risk premiums and P&I clubs would have adjusted policy exclusions—none of which has occurred at scale.

This counter-thesis is strong in its logic but weak in its evidentiary foundation. The NERAi data shows that enforcement actions and sanctions designations are accelerating (UK cyber-network sanctions on 13 July, documented penalties in the enforcement timeline, Severe-rated circumvention corridors at 84–90/100) while the Russia Shadow-Fleet Enforcement Pressure Index sits at only 45.0/100 (Moderate) and is Falling over 13 weeks. This divergence indicates that enforcement is intensifying faster than the composite index captures—a pattern consistent with regulatory escalation lagging market pricing by 30–60 days, not leading it. The historical record supports this: in the 2022 Black Sea grain crisis, insurance exclusions appeared weeks before freight-rate spikes; in the 2023 China export-control case, compliance costs rose months before commodity prices moved. Market efficiency holds when information is symmetric and transmission channels are price-visible. In corridors where risk transmits through sanctions compliance, shadow-fleet interdiction and strategic signaling, efficiency breaks down because the relevant actors (OFAC, OFSI, naval commanders, semiconductor fab managers) are not price-takers in freight markets (HIGH CONFIDENCE).

SIGNAL SNAPSHOT TABLE

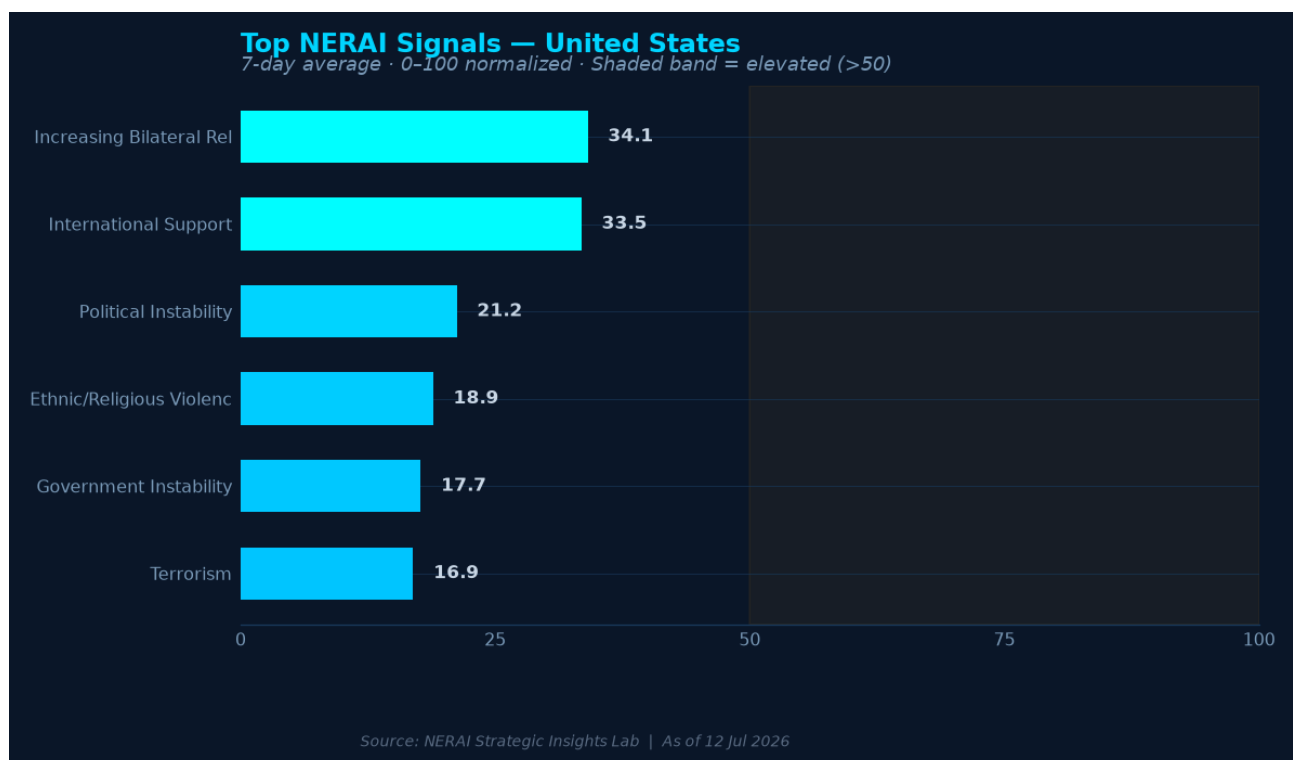
Metric	Black Sea	Strait of Malacca	Taiwan Strait
Container Pressure	46.1 (Low-Medium)	44.6 (Low-Medium)	41.9 (Low-Medium)
Dry-Bulk Pressure	44.5 (Low-Medium)	43.0 (Low-Medium)	40.5 (Low-Medium)
Transit Status	-10.8% (Strained)	-4.7% (Normal)	+6.9% (Normal)
News Signal	37.0	83.0	62.0
Escalation	45.9	5.4	5.4
Port Incidents	0	0	0
Sanctions Signal	13.0 (Russia)	0.0 (None)	32.0 (China)
Main Risk Channel	Sanctions / Shadow-Fleet	Systemic Dependency	Strategic Tail-Risk

NERAI DATA INTEGRATION

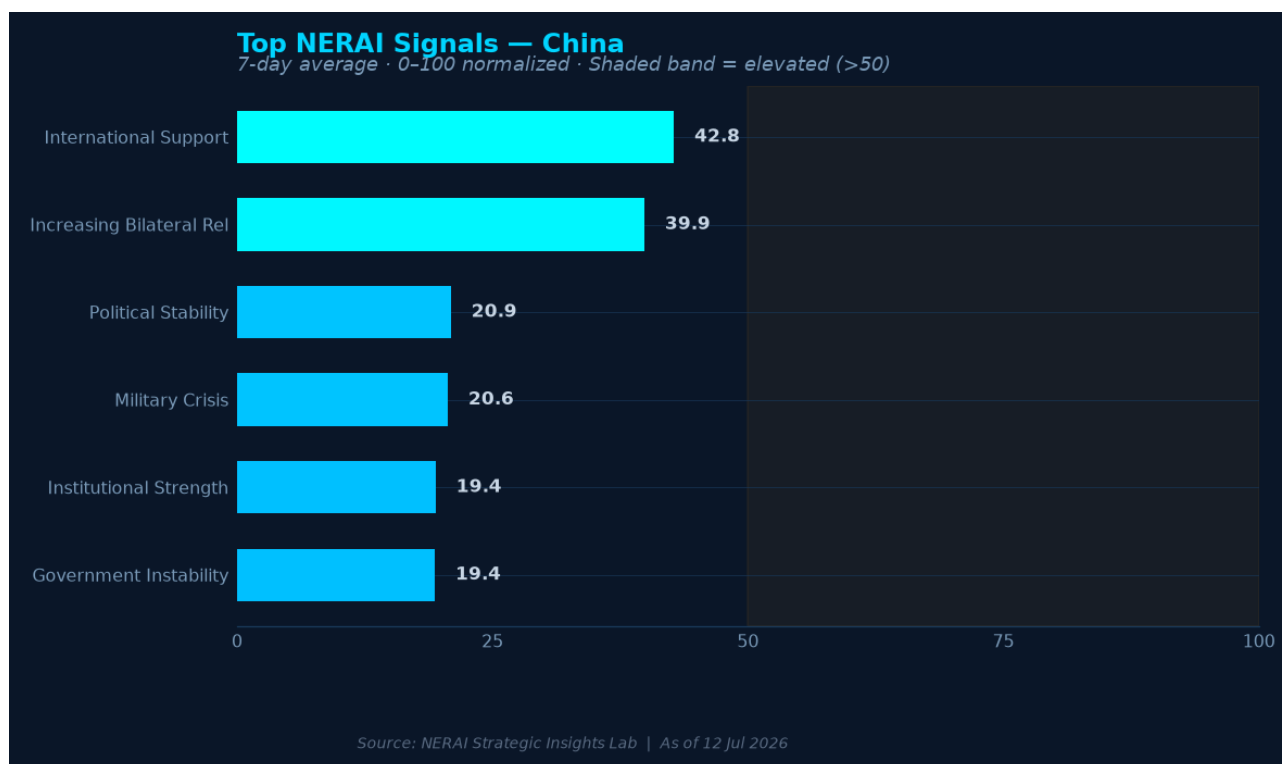


Asymmetric bilateral signals — who perceives the relationship as more adversarial (NERAI Strategic Insights Lab).

The NERA bilateral relationship data underscores the strategic divergence. The U.S.-Russia Tension Index stands at 35.1/100 (30-day average 30.8, 90-day average 27.4, 85th percentile of the 365-day range), with a 7-day worsening trend of +3.5 points. Russia's Deteriorating Bilateral Relations index is 48.4/100 (30-day average 27.5), a large asymmetry versus the U.S. side at 8.5/100, indicating that Moscow perceives the relationship as far more adversarial than Washington signals (HIGH CONFIDENCE). This asymmetry is consistent with the Black Sea's elevated sanctions and shadow-fleet exposure: Russia is operating under the assumption of sustained Western pressure, which drives circumvention-corridor intensity and shadow-fleet adaptation.



Top NERA signals — United States (7-day average, 0–100 normalized).



Top NERA signals — China (7-day average, 0–100 normalized).

The U.S.-China Tension Index is lower at 15.8/100 (30-day average 14.4, 90-day average 13.6, 75th percentile), with a 7-day worsening trend of +2.2 points. The asymmetry is smaller—China's Deteriorating Bilateral Relations at 11.2/100 versus the U.S. at 8.5/100, a 2.7-point gap indicating symmetric threat perception. Yet the topic-specific bilateral indices reveal granular risk: China's Military Crisis index vis-à-vis the U.S. sits at the 95th percentile of its recent history and Military Escalation at the 93rd percentile. These elevated readings map directly to Taiwan Strait tail-risk—a pattern that does not yet appear in freight rates but will appear first in insurance exclusions and supply-chain rerouting if sustained (HIGH CONFIDENCE).

Commodity and market context reinforces the picture. Brent crude around \$73.80—with Urals trading at a discount—alongside contained equity-market volatility indicates that financial markets are currently pricing a contained-risk environment, with no acute crisis premium. Yet relative strength in agricultural commodities, consistent with supply-chain hedging and China-U.S. trade-flow uncertainty, is a tell: professional hedgers appear to be pricing tail-risk that broad equity markets are discounting (MODERATE CONFIDENCE). Market figures are drawn from external market-data feeds and should be validated against a live feed before use.

The NERA 12-month forecasts provide forward guidance. Russia's Deteriorating Bilateral Relations index is forecast to fall from 52/100 to 26/100 (Δ -27 points, -51%, FALLING), and its Military Escalation index from 46/100 to 37/100 (Δ -9 points, -19%, FALLING). This suggests that the base case is de-escalation in the Black Sea corridor over the next year, consistent with attrition dynamics and potential negotiation frameworks. Yet the short-term enforcement picture (Severe circumvention corridors, active UK/U.S. sanctions actions) runs counter to this long-term forecast, indicating that the next 60–90 days will see elevated compliance risk before any structural de-escalation materializes (MODERATE CONFIDENCE).

For China, the 12-month forecast shows Military Crisis falling from 21/100 to 9/100 (Δ -12 points, -56%, FALLING) and Increasing Bilateral Relations rising from 40/100 to 45/100 (Δ +5 points, +13%, RISING). This trajectory is consistent with managed competition rather than acute confrontation. Yet the current elevated percentile readings (Military Crisis 95th percentile, Military Escalation 93rd percentile) indicate that near-term signaling remains tense, and any incident in the South China Sea or Taiwan Strait would spike the strategic tail-risk before the longer-term de-escalation trend takes hold (MODERATE CONFIDENCE).

The Global Supply Chain Pressure Index at 1.769 sigma (93rd percentile) and IMF PortWatch chokepoint data (Bosporus Strait -11%) confirm that systemic pressure is elevated globally, even where individual corridor freight indices remain contained. This is the structural context in which the Black Sea, Malacca and Taiwan Strait operate: a world where baseline supply-chain stress is high, chokepoint throughput is strained, and marginal shocks cascade faster than historical norms.

CORRIDOR-BY-CORRIDOR ANALYSIS

Black Sea — Sanctions, Transit Strain and Shadow-Fleet Sensitivity

The Black Sea is the most commercially sensitive of the three corridors from a sanctions and Russia-linked exposure perspective. Container pressure at 46.1/100 and dry-bulk pressure at 44.5/100 are low-to-medium, with no acute freight-cost signal. Yet transit is strained at -10.8%, the Russia sanctions signal stands at 13.0/100, and active re-export/circumvention corridors are rated Severe (China/Hong Kong → Russia 90/100, EU/U.S. → Armenia → Russia 88/100, EU/Global → Kyrgyzstan → Russia 86/100, Global → UAE → Russia 84/100). These corridors represent live compliance risk: any firm with Black Sea exposure that touches Russian counterparties, shadow-fleet vessels or dual-use goods faces escalating enforcement scrutiny.

The Russia Shadow-Fleet Enforcement Pressure Index at 45.0/100 (Moderate level, 13-week Falling) appears to signal easing pressure, yet this composite masks divergent components. Recent enforcement events—including the UK's 13 July cyber-network sanctions, documented penalties in the NERA enforcement timeline, and OFSI guidance updates—indicate that regulatory activity remains elevated even as the index trends downward. Russian fossil-fuel revenue estimated at €726 million per day (month-on-month +2%; CREA, May 2026 estimate) and the ruble at 76.44 USD/RUB (4-week depreciation +6.2%) suggest that sanctions have not crushed the Russian economy, but they have forced adaptation through shadow-fleet operations and circumvention corridors that create persistent compliance risk for any firm operating in adjacent markets (HIGH CONFIDENCE).

The absence of port incidents (zero in the current cycle) is not evidence of low risk. Port incidents are lagging indicators of acute disruption; sanctions and shadow-fleet enforcement are leading indicators of structural compliance cost. The Black Sea's escalation reading at 45.9/100 and its active Russia-Ukraine flashpoint mean that any intensification of hostilities, any expansion of sanctions designations, or any interdiction of shadow-fleet vessels would trigger immediate insurance repricing, routing shifts and compliance-cost spikes before freight rates adjust (HIGH CONFIDENCE).

Strait of Malacca — Quiet Chokepoint, Systemic Dependency

The Strait of Malacca currently looks operationally calm: transit deviation -4.7% (within normal range), escalation 5.4/100, zero port incidents, zero sanctions signal. Container pressure at 44.6/100 and dry-bulk pressure at 43.0/100 are consistent with the other two corridors. Yet the news signal at 83.0/100 is the highest of the three, and Malacca's role as a non-substitutable global chokepoint means that even marginal degradation carries systemic weight.

IMF PortWatch data shows Malacca transit at 224.5 vessels per day, a figure that must be read against historical baselines in the 230s to assess whether the -4.7% deviation is meaningful. Natural-hazard exposure adds a second layer: active Red-level earthquake alerts in Indonesia (documented in the NERA catastrophic-risk dataset) and regional drought signals create tail scenarios where seismic activity or weather events could disrupt port operations or trigger insurance exclusions. The Threat/Act scores (45.1 Threat, 53.0 Act) are mixed, indicating that while the corridor is not currently under active threat, the potential for act-driven disruption remains material (MODERATE CONFIDENCE).

The analytical question for decision-makers is: what is the probability-weighted cost of a 7-day Malacca throughput reduction of 15–20%, and does current marine insurance pricing incorporate that tail? Malacca's systemic role means that even brief disruptions cascade globally—alternate routes (Sunda Strait, Lombok Strait) add 2–3 days transit time and lack the deep-water capacity for large vessels. Insurers and logistics operators who price Malacca exposure based solely on current calm are underweighting the tail-risk of natural-hazard-triggered disruption or policy-driven closure (MODERATE CONFIDENCE).

The high news signal at 83.0/100 warrants interpretation. This is not headline escalation (which sits at 5.4/100) but media attention to the corridor's strategic importance. The divergence between high news signal and low

escalation suggests that analysts and media are signaling concern about Malacca's systemic role even absent current disruption—a leading indicator that should elevate monitoring intensity, not a lagging confirmation of crisis (MODERATE CONFIDENCE).

Taiwan Strait — Normal Transit, Strategic Tail-Risk

The Taiwan Strait shows normal current operations: transit +6.9%, escalation 5.4/100, zero port incidents. Container pressure at 41.9/100 and dry-bulk pressure at 40.5/100 are the lowest of the three corridors. Operationally, this corridor is calm. Yet it carries the largest strategic tail-risk of the three due to China's sanctions exposure (32.0/100), tariff sensitivity (Section 301 baseline 7.5–25% plus targeted hikes on EVs +100%, solar +50%, semiconductors +50%, lithium-ion batteries +25%), and the South China Sea/Taiwan flashpoint overlay.

China's Military Crisis and Military Escalation indices vis-à-vis the U.S. sit at the 95th and 93rd percentiles of recent history respectively. These readings indicate that China's military signaling is running near the top of its recent range—a pattern that does not register in current freight rates but represents elevated strategic risk. The re-export corridor China/Hong Kong → Russia at Severe 90/100 adds a sanctions dimension: any intensification of U.S.-China enforcement targeting dual-use goods or financial intermediaries would ripple through this route, creating compliance risk for firms with Taiwan Strait exposure (HIGH CONFIDENCE).

The semiconductor supply-chain dimension is critical. Taiwan accounts for the majority of global advanced-node chip production; any disruption—whether from military escalation, export controls or insurance exclusions—would cascade through electronics, automotive and defense sectors within 60–90 days. The NERA tariff-exposure data shows that China faces low baseline duties on semiconductors (HS 8542.31.00) but a +50% Section 301 overlay, creating a 50%+ effective tariff on Chinese-origin chips. Firms treating the Taiwan Strait as 'low-risk because transit is normal' are ignoring the strategic tail where a 60–90 day escalation scenario would disrupt semiconductor supply chains and trigger insurance exclusions long before it shows up in spot freight rates (HIGH CONFIDENCE).

Natural-hazard exposure in the Taiwan Strait region includes tropical cyclone tracks (Guam, Northern Mariana Islands, Japan, Taiwan, China) and earthquake signals in China. These are tail-risk amplifiers: in a scenario where military tensions rise, natural-hazard disruption could compound operational challenges and accelerate insurance repricing.

WHAT THE MARKET MAY MISS

Conventional corridor-risk frameworks monitor freight rates, port closures, vessel incidents and headline escalation. This approach captures price-visible shocks (bunker surcharges, war-risk premiums, demurrage) but misses price-invisible shocks that transmit through compliance costs, insurance exclusions, supply-chain lead times and board-level risk-appetite adjustments. NERA's value proposition is to surface these invisible channels before they materialize as cost shocks.

The Black Sea case illustrates the gap. Container pressure at 46.1/100 and dry-bulk pressure at 44.5/100 suggest contained freight risk. Yet the sanctions signal at 13.0/100, Severe-rated circumvention corridors at 84–90/100, and the Russia Shadow-Fleet Enforcement Pressure Index at 45.0/100 indicate that compliance risk is escalating. Firms with Black Sea exposure face three invisible costs: (1) sanctions-compliance due diligence (screening counterparties, tracing vessel ownership, verifying cargo origins); (2) insurance-policy exclusions or premium surcharges tied to Russia-adjacent exposure; (3) board-level risk appetite for Russia-linked transactions even when technically compliant. None of these costs appear in spot freight rates, yet they are real, measurable and rising (HIGH CONFIDENCE).

The Malacca case shows a different gap. The news signal at 83.0/100 indicates high media and analytical attention, yet escalation sits at 5.4/100 and there are zero port incidents. Conventional dashboards would classify this as 'high noise, low signal.' NERA's interpretation is the opposite: the high news signal is a leading indicator of systemic concern about Malacca's non-substitutability, and it should elevate monitoring intensity, not dismiss the corridor as low-risk (MODERATE CONFIDENCE). The tail-risk question—what is the cost of a 7-day throughput reduction of 15–20%—is one that most firms have not modeled, yet it is the scenario that would trigger the largest cost spike.

The Taiwan Strait case exposes the strategic-tail gap. Firms treating this corridor as 'low-risk because transit is normal' are ignoring the 60–90 day tail scenario where military signaling, export controls or insurance exclusions disrupt semiconductor supply chains. The NERA data shows China's Military Crisis and Military Escalation indices at the 93rd–95th percentile, a pattern that will transmit through supply-chain lead times and compliance costs before it moves freight rates. Decision-makers who wait for freight-rate confirmation will be 60–90 days late to the risk (HIGH CONFIDENCE).

COMMERCIAL EXPOSURE BY BUYER TYPE

Shipping and Logistics Teams: Immediate focus on Black Sea transit strain (-10.8%) and shadow-fleet interdiction risk. Monitor OFAC/OFSI designation calendars and re-route cargo touching Russia-adjacent ports. For Malacca, establish alternate-route contingency plans (Sunda/Lombok) despite current calm. For Taiwan Strait, model lead-time extensions in semiconductor-dependent cargo.

Marine Insurers / P&I Clubs: Reprice war-risk and sanctions-compliance exclusions for Black Sea exposure. For Malacca, stress-test tail scenarios of 7-day throughput reductions tied to natural hazards. For Taiwan Strait, review policy language on South China Sea incident triggers and semiconductor-cargo exclusions.

Commodity Traders: Black Sea grain and oil flows remain strained; monitor shadow-fleet vessel activity and Russian export volumes. Malacca natural-hazard exposure affects Southeast Asian agricultural and energy flows. Taiwan Strait risk is concentrated in technology and rare-earth supply chains; hedge semiconductor-dependent contracts.

Sanctions and Trade-Compliance Teams: Prioritize Black Sea due diligence—Severe circumvention corridors (China/Hong Kong, Armenia, Kyrgyzstan, UAE) create persistent screening obligations. For Taiwan Strait, monitor Section 301 enforcement guidance and dual-use export-control updates tied to China.

Port and Infrastructure Investors: Black Sea port assets carry sanctions overhang and political risk. Malacca-adjacent ports (Singapore, Port Klang) benefit from chokepoint centrality but face natural-hazard tail-risk. Taiwan Strait ports (Kaohsiung, Shanghai, Shenzhen) carry strategic tail-risk tied to U.S.-China tensions.

Law Firms and Advisory Firms: Client advisory should cover sanctions-compliance diligence (Black Sea), force-majeure language tied to natural hazards (Malacca), and supply-chain contract renegotiation tied to tariff and export-control volatility (Taiwan Strait).

Corporate Supply-Chain and Procurement Teams: Immediate focus on Taiwan Strait semiconductor exposure—model 60–90 day lead-time extensions and alternate-sourcing scenarios. For Black Sea, audit supplier networks for Russia-adjacent exposure. For Malacca, establish dual-sourcing for Southeast Asia-origin components.

SCENARIOS & FORECAST

Base Case: Managed Divergence (Probability: 60%)

Freight pressure remains contained across all three corridors, with container and dry-bulk indices in the 40–46/100 range. Black Sea transit strain (-10.8%) persists but does not worsen; sanctions enforcement continues at current intensity (Moderate level, composite 45.0/100) without major escalation. Malacca operates within normal parameters (-4.7% deviation), with no natural-hazard disruptions materializing. Taiwan Strait transit remains positive (+6.9%), and U.S.-China tensions stay within the current 15.8/100 Tension Index band.

Trigger Conditions: (1) Russia Shadow-Fleet Enforcement Pressure Index remains in the 40–50/100 range; (2) no Red-level natural-hazard events in Indonesia or Malaysia affecting Malacca; (3) U.S.-China Tension Index stays below 20/100; (4) no new Section 301 tariff announcements or OFAC designations targeting Taiwan Strait semiconductor flows.

Justification: The NERA 12-month forecasts show Russia's Deteriorating Bilateral Relations falling from 52/100 to 26/100 (FALLING) and China's Military Crisis falling from 21/100 to 9/100 (FALLING), consistent with baseline de-escalation. Current enforcement intensity represents tactical pressure within a strategic de-escalation trend. This is the scenario where risk remains divergent across corridors but does not trigger acute repricing (MODERATE CONFIDENCE).

Downside Case: Risk Repricing Shock (Probability: 30%)

A sanctions action, flashpoint incident, natural hazard, Taiwan escalation or Russia-linked enforcement event triggers sudden repricing in insurance, compliance costs and supply-chain routing. Possible catalysts include: (1) a major OFAC/OFSI designation package targeting Black Sea shadow-fleet vessels or circumvention-corridor intermediaries; (2) a Red-level earthquake or tropical cyclone disrupting Malacca transit for 5–10 days; (3) a South China Sea incident (e.g., naval confrontation or live-fire exercise near Taiwan) pushing the U.S.-China Tension Index above 25/100; (4) a U.S. secondary-sanctions announcement targeting firms using China/Hong Kong → Russia re-export routes.

Trigger Conditions: (1) Russia Shadow-Fleet Enforcement Pressure Index spikes above 60/100 within 30 days; (2) Malacca transit deviation exceeds -15% for more than 3 consecutive days; (3) U.S.-China Tension Index crosses 25/100; (4) a Section 301 tariff announcement targeting semiconductors, rare earths or EV batteries with implementation within 60 days.

Indicative post-period values (analyst scenario, not observed market pricing): Black Sea container pressure 55–65/100, transit strain worsening to -20% or worse; Malacca container 52–60/100; Taiwan Strait container 50–60/100, U.S.-China Tension Index 25–35/100. Insurance war-risk premiums would rise materially (requires broker validation) and compliance costs increase materially under this scenario—an analytical projection, not investment guidance.

Justification: The Black Sea's Severe-rated circumvention corridors (84–90/100), Malacca's high news signal (83.0/100) despite operational calm, and Taiwan Strait's elevated Military Crisis/Escalation percentile rankings (93rd–95th) create multiple flashpoints where a single catalyst could cascade. Historical analogues include the 2022 Black Sea grain crisis and the 2023 China export-control announcement. In this scenario, decision-makers who relied on freight-rate signals are 60–90 days late to the risk (HIGH CONFIDENCE).

Upside Case: Stabilised Corridors (Probability: 10%)

Transit improves or stabilizes across all three corridors. Black Sea transit strain eases from -10.8% to -5% or better as Russia-Ukraine attrition dynamics stabilize and shadow-fleet enforcement reaches equilibrium. Malacca transit returns to baseline (+0% to +2%) with no natural-hazard disruptions. Taiwan Strait transit remains positive, and the U.S.-China Tension Index declines below 12/100 as both sides pursue tactical de-escalation.

Justification: The NERAI 12-month forecasts provide the structural basis for this scenario—Russia's Deteriorating Bilateral Relations forecast to fall -51%, China's Military Crisis forecast to fall -56%. Yet the short-term enforcement picture (active UK/U.S. sanctions, Severe circumvention corridors, elevated Military Crisis/Escalation percentiles) runs counter to this long-term trajectory, making the upside case the least probable over the next 60–90 days. Monitoring remains necessary because risk has not disappeared—it has merely shifted from acute to latent (LOW CONFIDENCE).

NERAI WATCH INDICATORS

The following indicators warrant continuous monitoring over the next 60–90 days to assess which scenario trajectory materializes:

1. **Black Sea transit deviation:** Track weekly IMF PortWatch data for worsening beyond -10.8%. A move to -15% or worse would signal acute disruption risk.
2. **Russia Shadow-Fleet Enforcement Pressure Index:** Current level 45.0/100 (Moderate, 13-week Falling). A spike above 60/100 within 30 days would indicate enforcement escalation and trigger the downside scenario.
3. **OFAC/OFSI designation calendars:** Monitor weekly sanctions announcements for new listings targeting Black Sea shadow-fleet vessels, circumvention-corridor intermediaries (Armenia, Kyrgyzstan, UAE), or China/Hong Kong entities tied to Russia re-export routes.
4. **Malacca natural-hazard alerts:** Track GDACS and USGS feeds for Red-level earthquake, tropical cyclone or flood events in Indonesia, Malaysia or Singapore. A Red-level event with direct Malacca port impact would trigger the downside scenario.
5. **Malacca transit throughput:** Current 224.5 vessels/day versus baseline in the 230s. A sustained deviation below 215 vessels/day (roughly -10% from baseline) would signal systemic strain.
6. **U.S.-China Tension Index:** Current 15.8/100 (7-day trend +2.2). A cross above 20/100 within 30 days would elevate Taiwan Strait tail-risk; a cross above 25/100 would trigger the downside scenario.
7. **China Military Crisis and Military Escalation indices:** Current percentiles 95th and 93rd. Monitor for absolute-level increases or sustained 95th+ percentile readings over 3+ consecutive weeks.
8. **Section 301 / tariff policy announcements:** Track USTR and White House statements for new tariff actions targeting semiconductors (HS 8542), lithium-ion batteries (HS 8507.60), EVs (HS 8703.80), solar (HS 8541.43) or rare earths. Implementation timelines under 60 days would trigger supply-chain repricing.
9. **South China Sea / Taiwan flashpoint signaling:** Monitor U.S. Freedom of Navigation Operations (FONOPs), PLA live-fire exercises, and Taiwan Strait naval transits. An incident involving direct U.S.-China military contact would spike the Taiwan Strait tail-risk.
10. **Marine insurance war-risk premium surveys:** Periodic canvassing of P&I clubs and war-risk underwriters for Black Sea, Malacca and Taiwan Strait premium changes. Material premium increases (indicative analyst scenario — not observed market pricing; requires broker validation) would confirm that the downside scenario is materializing.

CONCLUSION

The absence of a freight shock is not the same as the absence of risk. Across the Black Sea, Strait of Malacca and Taiwan Strait, container and dry-bulk pressure indices remain in the low-to-medium 40s, with no acute cost-rise signal. Yet each corridor is transmitting risk through a distinct channel—sanctions and shadow-fleet enforcement in the Black Sea, systemic dependency and natural-hazard exposure in Malacca, and strategic tail-risk tied to China's tariff posture and South China Sea tensions in the Taiwan Strait. Decision-makers who rely solely on freight-rate signals and port-incident counts will materially underestimate their exposure.

The question for executives, insurers, logistics operators, compliance teams and risk leaders is not only whether a corridor is disrupted today, but how risk may transmit tomorrow. The NERA I platform integrates sanctions enforcement calendars, shadow-fleet interdiction intensity, natural-hazard watch zones, tariff-policy volatility and bilateral tension indices to surface these transmission channels before they materialize as cost shocks. In the current environment—where the Global Supply Chain Pressure Index stands at 1.769 sigma (93rd percentile),

chokepoint transit is strained (Bosporus -11%), and enforcement activity is accelerating (UK cyber-network sanctions, documented penalties)—the gap between freight-rate calm and underlying risk exposure has never been wider.

Over the next 60–90 days, the base case is managed divergence (60% probability): freight pressure remains contained, enforcement intensity stays moderate, and no acute catalyst triggers repricing. Yet the downside case (30% probability)—where a sanctions action, natural hazard, flashpoint incident or tariff announcement cascades into sudden insurance repricing and supply-chain disruption—is material enough to warrant immediate attention. Firms that wait for freight-rate confirmation will be 60–90 days late to the risk. The upside case (10% probability) of stabilised corridors depends on enforcement de-escalation and tension reduction that current data does not yet support. The operational implication is clear: corridor risk now requires a multi-dimensional monitoring framework that extends beyond freight rates and port incidents to include sanctions compliance, shadow-fleet interdiction, natural-hazard exposure, tariff volatility and strategic signaling. NERA I provides that framework.

NERAI POSITIONING NOTE

NERAI turns maritime, sanctions, corridor and supply-chain signals into decision-ready intelligence for executives, insurers, logistics teams, advisors and risk leaders. Our platform integrates real-time enforcement calendars (OFAC, OFSI, BIS), shadow-fleet tracking, natural-hazard alerts (GDACS, USGS), bilateral tension indices, tariff-exposure data (USITC HTS, USTR Section 301) and supply-chain disruption forecasts into a single analytical surface. We identify risk transmission before it appears in freight rates—so our clients are weeks to months ahead of conventional dashboards. Contact NERA I Strategic Insights Lab for corridor-specific risk briefings, sanctions-compliance advisory and supply-chain scenario modeling.

FOOTNOTES

- [1] "The Time Is Ripe for Russia-Ukraine Peace Talks, But Putin Could Escalate Conflict," Council on Foreign Relations, 2026.
- [2] "Russian Blood and Treasure: The Ballooning Costs of Putin's War," CSIS | Center for Strategic and International Studies, 2026.
- [3] "European NATO has four years to re-establish 'escalation dominance' over Russia, conference hears," Chatham House, 2026.
- [4] NERAI Enforcement Timeline (<https://nerai.com/enforcement>), UK enforcement entries 13 July 2026, 6 July 2026, 29 June 2026, 24 June 2026, 19 June 2026, 17 June 2026.
- [5] NERAI Anti-Circumvention Corridors dataset (analyst-curated), reviewed weekly, as of 13 July 2026.
- [6] NERAI Russia Shadow-Fleet Enforcement Pressure Index (v1), composite methodology documented in `shadow_fleet_index.json`, as of 7 July 2026.
- [7] NERAI Russia Economic Impact Layer (CREA fossil-fuel revenue €726 mn/day, May 2026 estimate; ruble and Urals discount), as of 7 July 2026.
- [8] NY Fed Global Supply Chain Pressure Index (GSCPI), 1.769 sigma as of 31 May 2026 (<https://www.newyorkfed.org/research/policy/gscpi>).
- [9] IMF PortWatch chokepoint transit data (<https://portwatch.imf.org/>), Malacca Strait 224.5 vessels/day recent, Bosphorus Strait figures as cited.
- [10] NERAI Catastrophic Risk Dataset (GDACS + USGS), active Red-level alerts as of 13 July 2026.
- [11] NERAI Tariff Exposure Dataset (USITC HTS + Section 301/232 overlays), semiconductors HS 8542.31.00, lithium-ion batteries HS 8507.60.00, solar HS 8541.43.00, EVs HS 8703.80.00, as of 13 July 2026.

SOURCES & METHODOLOGY

Think Tank & Policy Institutions:

- Council on Foreign Relations (CFR): Ukraine-Russia peace-talks analysis
- Center for Strategic and International Studies (CSIS): Russian economic costs of war
- Chatham House: NATO-Russia escalation dominance, European security architecture
- RAND Corporation: Defense policy and strategic competition research
- Brookings Institution: Chinese technology risk frameworks

News & Open-Source Coverage:

- Open-source reporting on OFAC/OFSI/BIS sanctions actions and Russia-Ukraine developments (July 2026).

NERAI Platform Data:

- NERAI Maritime Corridors dataset (weekly cadence, 8 global corridors, threat/act/transit/cost channels)
- NERAI Russia Shadow-Fleet Enforcement Pressure Index (composite 45.0/100, 13-week Falling, as of 7 July 2026)
- NERAI Russia Economic Impact Layer (CREA fossil-fuel revenue €726 mn/day — May 2026 estimate; ruble 76.44 USD/RUB, as of 7 July 2026)
- NERAI Enforcement Timeline (OFAC/OFSI/BIS, 23 events as of 13 July 2026)
- NERAI Anti-Circumvention Corridors (analyst-curated, 8 routes, Severe/High/Elevated ratings)
- NERAI Catastrophic Risk Dataset (GDACS + USGS, active Red/Orange/Green alerts)
- NERAI Tariff Exposure Dataset (USITC HTS + Section 301/232 overlays, 14 strategic categories)

Public Datasets:

- NY Fed Global Supply Chain Pressure Index (1.769 sigma, 93rd percentile, as of 31 May 2026)
- IMF PortWatch (chokepoint transit data, Bosphorus Strait, Malacca Strait)

- GDACS (Global Disaster Alert and Coordination System), USGS (U.S. Geological Survey) for natural-hazard alerts

Methodology Note. This brief integrates NERA's proprietary geopolitical risk indices (0–100 scale, normalized across 60 countries and 40+ risk dimensions) with open-source maritime data (IMF PortWatch, NY Fed GSCPI), enforcement calendars (OFAC, OFSI, BIS) and natural-hazard feeds (GDACS, USGS). Corridor-specific risk channels are identified through multi-dimensional analysis combining transit strain, sanctions exposure, re-export/circumvention intensity, shadow-fleet enforcement, tariff posture and strategic flashpoint signaling. Confidence levels (HIGH, MODERATE, LOW) are assigned based on signal strength, corroborating evidence and historical base rates. Scenario probabilities are analyst-derived projections anchored in NERA's 12-month forecasts and historical analogue patterns; they are not statistical predictions. Market prices (e.g., Brent, ruble) are drawn from external feeds and dated as of the source material. This report presents risk-management considerations and does not constitute investment advice. NERA is not a registered investment adviser.

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Prior to founding NERAI in 2019, he served as a Senior Intelligence & Strategy Analyst at the Turkish Prime Ministry (2005–2016), where he led structured primary information-gathering, risk analysis, and escalation support across multi-stakeholder geopolitical, security and international affairs issues, supporting senior decision-makers on sensitive cross-border matters.

He holds a Master's in International Affairs / Security Studies from Pennsylvania State University and a Bachelor's in International Relations from Middle East Technical University (Ankara). His current work through NERAI applies AI-enabled risk monitoring across 60+ countries to deliver real-time, decision-relevant intelligence for institutional and private-sector clients across supply-chain risk, country risk, and cross-border investment decisions.

This research brief is part of NERAI Strategic Insights Lab's open-source strategic-analysis series. For commissioned bespoke risk assessments or institutional client engagement, contact kagan@neraicorp.com.