KROLL™

Kroll Economic Insights

What Escalation Risk in the Middle East Means for Global Energy, Trade and Mobility

KROLL

The significantly altered security landscape around the Strait of Hormuz has created uncertainty for energy flows, maritime transit and aviation. Kroll Economics, which helps leaders navigate geopolitical risk and economic uncertainty, has created a model that translates security developments into economic shocks and assesses their impact on energy, transport, trade and the global economy. The team also examines the implications for operational decision-making.

The Strait of Hormuz

A critical conduit for energy and trade, the Strait of Hormuz concentrates crude oil, refined products, LNG and general cargo flows into a narrow maritime corridor. There is limited effective bypass capacity. Pipelines in Saudi Arabia and the UAE, for example, can divert only a fraction of normal Hormuz throughput, according to public estimates. Changes in the Strait's security conditions can therefore have rapid and far-reaching implications even in the absence of a formal or sustained closure. About 20 million barrels per day—roughly one-fifth of global petroleum liquids consumption and more than a quarter of all seaborne oil trade—typically transit the Strait of Hormuz per day.

Beyond energy, the region is a key node in international aviation and logistics. Gulf hubs connect Asia, Europe and Africa, so conflict-related disruption also affects air networks, freight capacity and broader mobility.

What is at risk?

Disruption around the Strait of Hormuz can result in reduced transit, higher freight and fuel costs, and uneven access to insurance. These impacts can quickly erode the predictability on which global supply chains and mobility networks rely. Delays, rerouting and cost spikes—rather than immediate shortages—are likely to ensue.

If these issues persist, they tighten energy and trade balances, disrupt logistics planning and weaken assumptions about delivered costs and lead times. For decision-makers, this means greater uncertainty around budgets, sourcing and operational continuity—and a need to prepare for multiple disruption paths rather than a single base case.

Implications for Decision Makers

Leadership teams should:

1) separate what is known now from what is contingent upon a given scenario
2) avoid hardcoding short-term shocks into long-term decisions, and
3) retain flexibility as conditions evolve across the three scenario paths we have outlined below (The Scenario Framework).

Update near-term assumptions without locking in a new "base case"

- Refresh delivered energy and transport cost assumptions—fuel, freight, insurance—in near-term budgets, margin expectations and working capital plan, keep them explicitly timebound (weeks/months) and scenario-linked rather than embedding them in outer year forecasts.
- Differentiate crude from products in planning: in Hormuz disruptions, diesel/gasoil and jet fuel can tighten more than crude and transmit faster into supply chains and mobility.

Protect operational continuity in shipping, sourcing and contracting

- Treat insurance availability and voyage terms as gating items (not just costs). Review freight contracts, Incoterms, force majeure clauses and cargo coverage for Hormuz transits and Gulf-linked routings.
- Build optionality into procurement and logistics. Identify alternative suppliers, substitution opportunities, inventory buffers and contingency routings where feasible, recognizing that bypass capacity is limited and congestion can disrupt schedules even without a formal closure.

Treat aviation and tourism exposure as a connectivity risk, not only an energy-price risk

- For firms with travel demand, air cargo reliance or tourism exposure, plan for a physical disruption to Middle East hub connectivity—rerouting, schedule cuts, airspace constraints—as a separate channel from fuel costs.
- Stress test revenue and capacity assumptions for long-haul and hub-dependent flows (tourism destinations, premium travel corridors, time sensitive shipments), especially under the protracted and severe scenarios.

Align capital allocation and valuation with scenario ranges, not point forecasts

- Use the scenario set to bracket impacts on cash flows, discount rates/risk premia and terminal assumptions, rather than relying on a single deterministic price path.
- Where assets are energy, logistics or mobility linked—ports, airlines, airports, hospitality, trade exposed industrials—ensure investment committee papers explicitly reference which scenario the underwriting assumes and what would invalidate it.

Set governance around "triggers" and decision rights

- Establish a single cross-functional watchlist—finance, operations, supply chain, legal, risk—tied to the scenario triggers: shipping traffic and clustering, maritime advisories, war risk insurance terms, freight benchmarks and indicators of infrastructure damage.
- Pre-agree decision thresholds (e.g., if disruption persists beyond ~2 weeks, shift from Scenario 1 playbook to Scenario 2 actions; if confirmed infrastructure damage/outages persist 6-8+ weeks, activate Scenario 3 measures).

Communicate internally and externally with disciplined conditionality

- Use scenario language ("if-then" statements) in board and stakeholder communications; avoid precision, focusing on explicit exposures and mitigations instead.
- Anchor messaging in what is observable—security advisories, vessel behavior, insurance posture—and clearly separate that from modelled impacts and contingent risks.

KROLL

The Scenario Framework

Our scenario framework is designed to translate fast-moving security developments around the Strait of Hormuz into repeatable, observable economic shocks. We anchor on a baseline where the strait remains open and operating as it was prior to the conflict.

From this baseline, we vary outcomes along two core dimensions:

1) **the duration of elevated maritime risk, and**
2) **whether disruption remains a deliverability issue or escalates into physical impairment of export infrastructure.**

While the baseline assumes transit remains possible, a scenario in which the strait becomes effectively non-passable for a sustained period is captured within our most severe case, where physical damage and prolonged operational constraints significantly reduce export capacity and delay normalization.

This framework produces **three escalation scenarios**, which map current conditions into distinct disruption paths for global energy, transport and trade.

Scenario 1 — **Short, sharp disruption (weeks):** deliverability shock, rapid normalization

A brief escalation produces a frontloaded interruption to transit reliability through war risk insurance repricing/cancellation dynamics and shipowner hesitation, temporarily reducing effective throughput of the Strait of Hormuz without major infrastructure damage.

Energy markets react in two steps: risk premium first, then partial fundamentals tightening, with refined products (diesel and jet fuel) moving more sharply than crude given thinner markets and higher sensitivity to freight/insurance frictions.

The impacts are most acute in Asia (import costs and inventory stress) and in global mobility, where a short-lived jet fuel and routing shock drives temporary reductions in international capacity and demand.

Tourism weakens briefly before eventually rebounding.

Macro effects are temporary and concentrated in prices and trade frictions, with activity recovering as transit conditions normalize.

Scenario 2 — **Protracted disruption (months):** sustained deliverability constraints, persistent product and mobility stress

A longer conflict sustains a high-risk operating environment in which shipping continues but at a reduced efficiency. Insurance remains elevated/intermittently constrained, and freight stays high, keeping effective throughput impaired over multiple months even without a continuously enforced closure or a single major terminal outage.

The energy shock becomes more persistent and more economically salient through diesel/gas oil and jet fuel, where prolonged tightness functions as an “availability tax” on supply chains, aviation and trade.

International aviation responds with sustained schedule rationalization and fare pressure, while tourism impacts become more visible and uneven, largest in hub-dependent and long-haul reliant markets, with recovery taking multiple quarters.

Macro outcomes are characterized by higher inflation and weaker activity for longer, with trade and investment softer than baseline until transit reliability improves.

Scenario 3 — **Severe and prolonged disruption (most of 2026):** deliverability shock plus infrastructure damage

This last scenario extends through much of 2026 and adds physical damage to export infrastructure (terminals, pipelines, loading facilities) on top of persistent navigation risk. This shifts the system from transit friction toward enduring loss of export capacity and slower repair timelines.

Energy markets move into scarcity pricing. Crude remains structurally elevated, and volatility increases. Diesel and jet fuel become the dominant transmission channels into global inflation, freight and mobility.

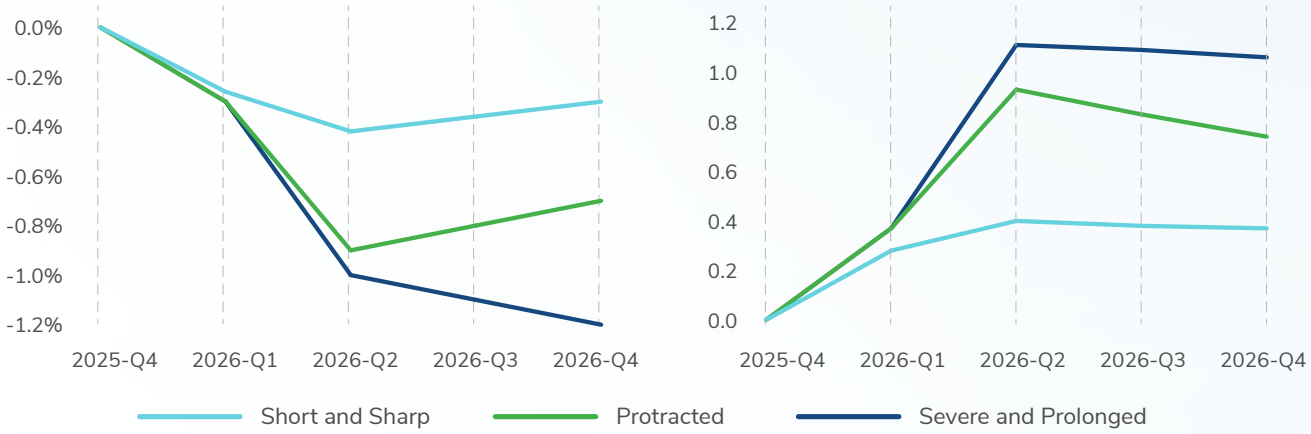
Aviation and tourism outcomes become multi-quarter and severe, with sustained capacity cuts, fare inflation and route rationalization, resulting in significant stress in hospitality and connected services.

Macro effects are persistent: weaker growth, higher inflation, a more durable hit to trade and investment as energy and transport constraints remain binding.

Global Impacts of the Scenarios

Figure 1 (below) summarizes the time profile of the global shock across the three scenarios, showing quarterly deviations from baseline in global output (left) and inflation (right). Impacts scale with both duration and severity, with the severe case remaining materially below baseline through the end of 2026.

Figure 1: Projected global economic output (LHS) and inflation (RHS) impacts*



Source: Kroll Economics Modeling
**All impacts are shown as percentage deviations from baseline*

Across all scenarios, higher energy costs and reduced international mobility weigh on global growth, with the impact peaking in **2026 Q2** before fading in Scenario 1 or remaining elevated in Scenarios 2–3.

- **Scenario 1:** Global output dips by about **0.3–0.4%** at the trough before partially recovering by year-end.
- **Scenario 2:** Losses deepen to around **0.9%** in Q2 and stay near **0.7%** below baseline at year-end.
- **Scenario 3:** The impact is most severe, with output falling to roughly **1.0–1.15%** below baseline through late 2026.

Table 1: Global economic impacts*

	Short and Sharp	Protracted	Severe and Prolonged
Global GDP	-0.3%	-0.7%	-1.2%
Global inflation	0.4%	0.7%	1.1%
Global exports	-1.3%	-2.6%	-3.9%
Global investment	-0.4%	-0.9%	-1.4%
Brent crude price (USD/bbl) (March – December 2026 average)	84	96	107
Global oil and gas output	-5.2%	-13.8%	-20.8%

Source: Kroll Economics Modelling
**All impacts are shown as percentage deviations from baseline*

Table 1 shows a clear rise in global energy prices across scenarios in 2026, with average Brent crude increasing to around USD 84/bbl in a short disruption, USD 96/bbl in a protracted case, and about USD 107/bbl in the severe scenario. These differences reflect the duration of deliverability constraints and, in the severe case, the added impact of infrastructure damage.

Oil and gas output is the primary mechanism for macroeconomic effects. Global oil and gas output is expected to fall by 5.2% in the short scenario, 13.8% in the protracted variant and 20.8% in the severe case as distribution is disrupted, forcing producers to curtail output.

Investment is a significant transmission channel. Global investment falls roughly 0.4% in the short scenario, 0.9% in the protracted one and 1.4% in the severe case as higher delivered energy and transport costs compress margins and increase uncertainty.

This is reinforced by weaker global exports, which decline by around 1.3%, 2.6% and 3.9% across the three scenarios, signalling softer cross-border demand and tighter trade conditions that dampen incentives to expand capacity.

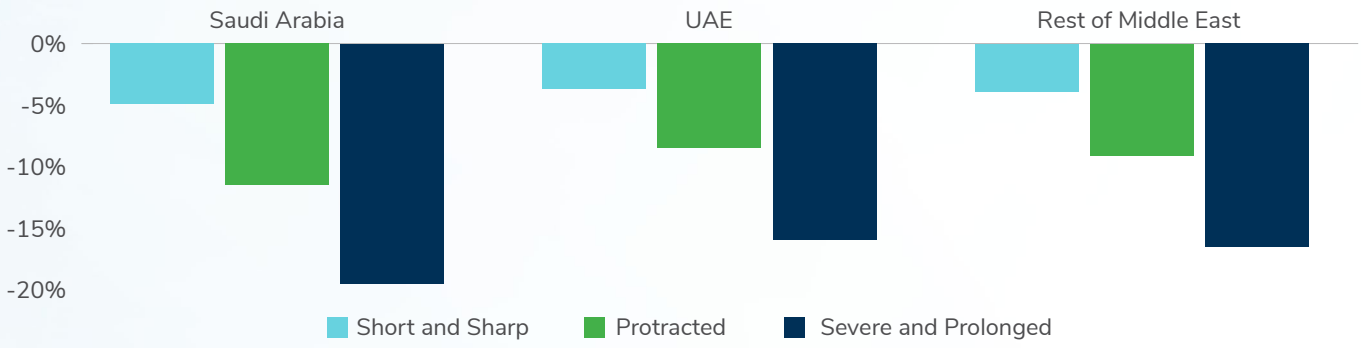
Regional Impacts of the Scenarios

Middle East and Iran: largest direct hit, with outsized stress in hub economies

The most significant economic impacts fall on the Gulf and wider Middle East, where elevated security conditions disrupt transport, logistics and the region's role as a key connector for energy and trade. Figure 2 shows sharp GDP declines across all Middle East economies, deepening as disruption persists.

Saudi Arabia sees the largest losses across scenarios, with the UAE and other regional economies close behind. This reflects their higher exposure to energy-export activity and the heavier impact of elevated freight, insurance and transit constraints on export-linked production and investment.

Figure 2: GDP impact on Middle Eastern economies in 2026*



Source: Kroll Economics Modeling
**All impacts are shown as percentage deviations from baseline*

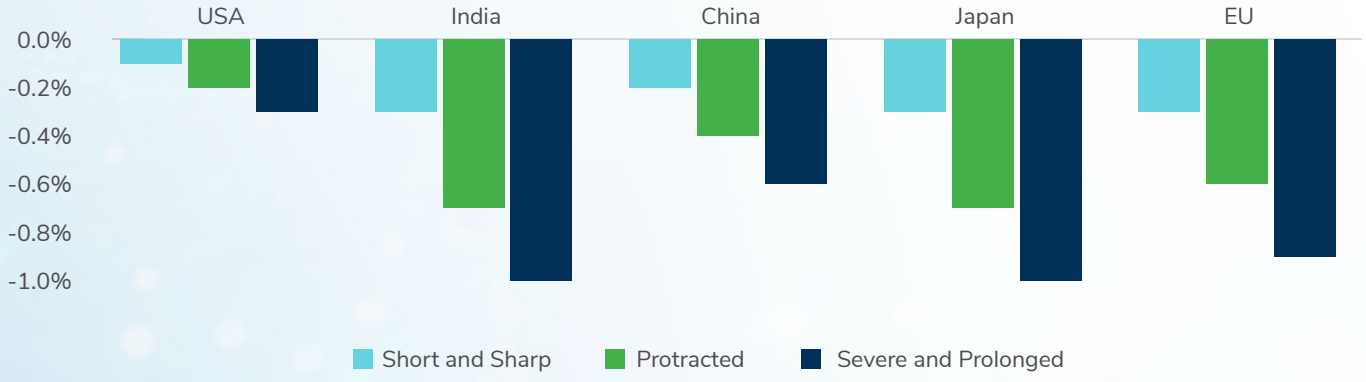
The direct impact to Iran would be shaped by the interaction of kinetic activity, infrastructure risk and constraints on maritime and aviation operations in the region. In the more severe scenario path, persistent insecurity and potential infrastructure damage amplify the regional losses by extending the shock from short-lived disruption into a longer period of impaired export and transport capability.

Asia and other energy importers: first-order exposure through higher delivered energy costs

Asia faces the strongest impact outside the Middle East because most Hormuz-linked crude and LNG flows are Asia-bound; major importers in the region are directly exposed to higher delivered energy costs and supply uncertainty.

Figure 3 shows material GDP losses across key economies, with India and Japan most affected, and China and the EU also seeing progressively larger declines as disruption persists. Though less dependent on Hormuz-linked imports, the U.S. still experiences a measurable drag, reflecting how global energy prices and trade conditions transmit the shock even to less exposed economies.

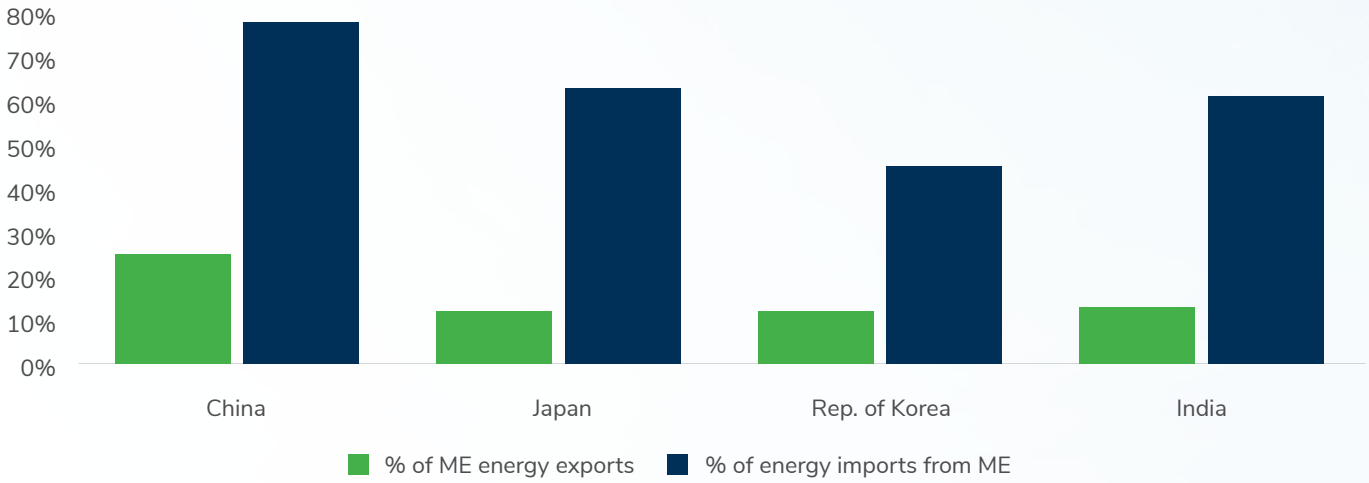
Figure 3: GDP impact on major economies in 2026*



Source: Kroll Economics Modeling
**All impacts are shown as percentage deviations from baseline*

Figure 4 shows that key Asian economies rely heavily on Middle Eastern energy, with the region supplying around 78% of China's imports, 63% of Japan's, 45% of Korea's and 61% of India's. These same countries absorb a substantial share of Middle East energy exports, meaning Asia faces a dual exposure: it is simultaneously the region's main export destination and one of the most dependent importers. This concentration makes Asia the first region where higher delivered energy costs and supply uncertainty translate into broader macroeconomic effects.

Figure 4: Middle East (ME) energy trade with key partners



Source: UN Comtrade

Energy exporters with offsetting benefits: improved terms of trade, but not immunity

Some energy exporting economies outside the immediate conflict zone may experience offsetting benefits through improved terms of trade and higher realized export prices, particularly in scenarios where global oil prices rise materially and persistently. These benefits are not uniform and not automatic. If disruption is driven by deliverability constraints, then gains from higher prices can be partly offset by global demand weakness, tighter financial conditions and knock-on trade frictions.

Moreover, for exporters with close trade exposure to Asia or with shipping/insurance sensitivity, the same operational disruptions (insurance availability, freight spikes, route instability) can still raise costs and complicate logistics even if headline commodity revenues rise.

Crosscutting: tourism and aviation disruption affects all regions, especially long-haul and hub-dependent markets

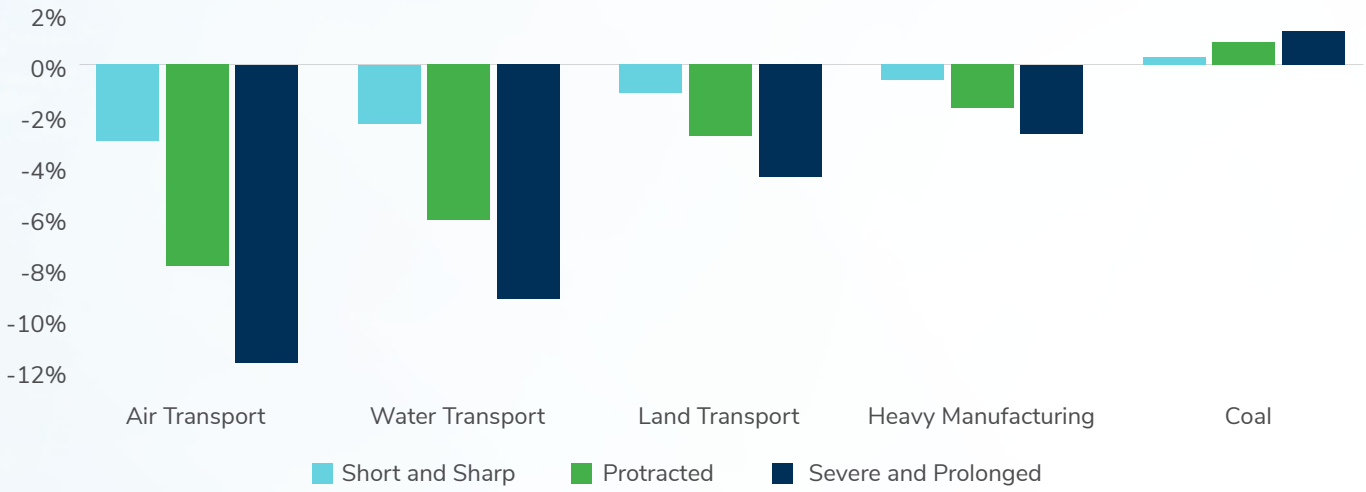
The Middle East plays a critical role as a global travel connector, with hub carriers linking Asia, Europe and Africa. Physical disruption to airline operations, airspace routings and hub reliability can reduce passenger and air cargo flows and weaken tourism demand globally. Larger tourism shortfalls would be concentrated in long-haul destinations and markets that rely on Middle Eastern hub connectivity.

Sectoral Impacts of the Scenarios

Across the three scenarios, sectoral impacts are driven by two reinforcing channels:

1) higher delivered energy and refined product costs, with diesel and jet fuel often moving more sharply than crude in a Hormuz disruption, and
2) physical disruption to transport networks, especially the Middle East's role as a global aviation hub and a critical maritime corridor for both energy and general trade.

Figure 5: Global output of key sectors in 2026*



Source: Kroll Economics Modeling
**All impacts are shown as percentage deviations from baseline*

Aviation – airlines, air cargo, airports

Aviation is one of the most exposed sectors, facing both higher jet fuel costs and disruption to routing and hub connectivity.

Figure 5 shows global air transport activity falling by around 3% in a short disruption, 8% in a protracted one and roughly 12% in a severe case.

In short disruptions, airlines can manage through fuel surcharges, schedule adjustments and limited capacity trimming. But as disruption persists, the impact becomes structural: carriers cut long-haul routes, reduce frequencies and face tighter belly-hold cargo capacity, increasing pressure on freight rates and delivery times. This sits alongside broader transport impacts in water and land logistics, reinforcing how mobility constraints propagate through the wider system.

Tourism, hospitality and passenger services: a connectivity shock, not just an energy shock

Tourism impacts are not simply a byproduct of higher fuel prices; they arise because the Middle East's hub carriers and transit airports are central to long-haul travel between Asia, Europe and Africa.

Tourism and international travel weaken modestly in the short scenario. That weakening becomes materially more severe and persistent in the protracted and severe scenarios, with long-haul-dependent destinations at the high end.

Heavy manufacturing

Heavy manufacturing is among the most exposed, because it relies on energy-intensive production and diesel-dependent logistics.

Figure 5 shows global output falling around 0.6% in a short disruption, 1.7% in a protracted one and roughly 2.7% in the severe case, reflecting how quickly costs and delays accumulate as disruption persists.

Refined products, especially diesel, transmit the shock faster than crude into the global economy by acting as an "availability tax" on freight, trucking and industrial logistics. As operating costs rise and uncertainty increases, firms typically delay discretionary capex and working-capital expansion, reinforcing the broader pattern of weaker trade and investment in more prolonged scenarios.

Coal as a substitute fuel

Coal acts as a fallback fuel in all disruption scenarios, as tighter gas availability and higher delivered gas prices—especially in Asia and parts of Europe—prompt utilities to shift generation away from gas where coal-fired capacity remains available. Figure 5 shows coal output rising across scenarios, modestly in the short case and more noticeably in protracted and severe disruptions.

This reflects simple fuel economics and security-of-supply dynamics: coal is easier to stockpile, less reliant on just-in-time shipping and less exposed to route volatility than LNG. As gas markets tighten, coal temporarily regains competitiveness in power generation and some industrial processes, even as overall energy demand weakens.

Retail, consumer services and discretionary spending

Consumer-facing sectors are primarily affected via the inflation channel and, in many markets, reduced discretionary travel and services spend.

There is higher global CPI relative to baseline in the peak quarter in each scenario, with persistence rising in Scenarios 2–3; this is consistent with a near-term squeeze on real incomes that tends to weigh most on discretionary consumption categories.

Where tourism is significant, the hit is amplified by weaker arrivals and reduced aviation connectivity rather than fuel prices alone.

Financial-and investment-linked sectors

Financial conditions are influenced less by any single price variable and more by the duration and uncertainty of disruption.

Weaker global investment in the peak quarter across scenarios, consistent with higher risk and lower expected profitability, discourages capital spending. In the severe scenario, the persistence of disruption and infrastructure damage extends the period of elevated uncertainty, increasing the likelihood of delayed projects, tighter financing conditions for travel and trade exposed assets, and greater dispersion in outcomes across sectors.

KROLL

What to Watch: Scenario-linked indicators

Given the fluid operating environment, the key question is not whether risk exists, but which disruption path is emerging, so we focus on a small set of observable indicators that distinguish a short-lived shock from a protracted or a severe scenario.

This framework is designed to be refreshed as conditions evolve. The indicators below map directly to the mechanisms that distinguish a short, sharp deliverability shock (Scenario 1) from a protracted disruption (Scenario 2) and infrastructure damage (Scenario 3).

Shipping access and traffic through Hormuz

The first question is whether commercial transit is resuming or stalling. Realtime vessel behavior, entries/exits through the Strait, U-turns, anchoring and clustering on both sides provide the clearest operational read on deliverability conditions.

- Scenario signal: *Scenario 1* if traffic stabilizes and normalizes within 10–14 days; *Scenario 2* if depressed traffic and avoidance persist beyond 2 weeks; *Scenario 3* if traffic remains severely impaired over 6–8+ weeks.

War risk insurance: availability, cancellations and persistence

War risk insurance is a critical "gatekeeper" for transit. Watch for cancellation notices, tightening of terms, and the possibility of selective uninsurability for particular voyages or counterparties—changes that can constrain shipping without a formal closure.

- Scenario signal: *Scenario 1* if cancellations cease and premia stabilize quickly; *Scenario 2* if repricing cycles recur for weeks; *Scenario 3* if coverage becomes intermittently unavailable "at any price" alongside sustained disruption.

Freight: the first hard price of disruption

Tanker freight is typically the earliest "hard" market price to react. Sustained elevation in VLCC and product tanker route economics, alongside persistent waiting time/congestion signals, indicates that risk and inefficiency are reducing effective fleet supply.

- Scenario signal: *Scenario 1* if freight spikes then mean reverts; *Scenario 2* if rates remain near crisis highs for months; *Scenario 3* if freight remains extreme in parallel with physical damage signals and prolonged throughput loss.

Energy market structure: "pricing event" versus "fundamentals event"

Beyond headline crude, monitor market structure for evidence that disruption is tightening prompt availability. Prompt spreads and curve shape (e.g., widening time spreads / stronger backwardation) are practical indicators that the shock is moving from risk premium toward fundamentals.

Refined product indicators matter disproportionately in a Hormuz disruption: stress in diesel/gasoil and jet fuel relative to crude is a key signal because these markets are thinner and more sensitive to logistics and insurance frictions.

- Scenario signal: *Scenario 1* if prompt tightness fades quickly; *Scenario 2* if spreads/cracks remain firm for months; *Scenario 3* if extreme product tightness persists even as demand weakens.

Evidence of infrastructure damage (tail-case threshold)

The cleanest line between protracted disruption and the severe tail (*Scenario 3*) is verifying physical damage to export infrastructure, such as terminals, pipelines, loading facilities or sustained export outages, with slow repair progress.

- Scenario signal: *Scenario 3* if infrastructure damage/outages persist beyond 6–8 weeks and repair timelines remain uncertain or repeatedly disrupted.

Aviation and tourism: the connectivity channel

Finally, track whether the shock is becoming a broader mobility and tourism disruption, not just an energy price event. Sustained airspace constraints, schedule cuts and hub connectivity losses are leading indicators that passenger flows and air cargo capacity are being materially affected.

- Scenario signal: *Scenario 1* if schedules normalize quickly; *Scenario 2* if capacity reductions persist through a travel season; *Scenario 3* if multi-quarter network retrenchment emerges alongside elevated fuel and security constraints.

KROLL™

About Kroll

As the leading independent provider of financial and risk advisory solutions, Kroll leverages our unique insights, data and technology to help clients stay ahead of complex demands. Kroll's global team continues the firm's nearly 100-year history of trusted expertise spanning risk, governance, transactions and valuation. Our advanced solutions and intelligence provide clients the foresight they need to create an enduring competitive advantage. At Kroll, our values define who we are and how we partner with clients and communities. Learn more at Kroll.com.

M&A advisory, capital raising and secondary market advisory services in the United States are provided by Kroll Securities, LLC (member FINRA/SIPC). M&A advisory, capital raising and secondary market advisory services in the United Kingdom are provided by Kroll Securities Ltd., which is authorized and regulated by the Financial Conduct Authority (FCA). Valuation Advisory Services in India are provided by Kroll Advisory Private Limited (formerly, Duff & Phelps India Private Limited), under a category 1 merchant banker license issued by the Securities and Exchange Board of India.