GLOBAL SYSTEMIC RUPTURE:
The Fourth Systemic Crisis and Its Architecture

Velina Tchakarova, Marco Felsberger, Herbert Saurugg

12. April 2026

Introduction

We are currently in the midst of the fourth and, to date, most severe systemic global crisis since the global financial crisis of 2007. The three previous crises, which were related to so-called systemic risks—the financial crisis (2007), the COVID-19 pandemic (2020), and Russia's war of aggression against Ukraine (2022)—each generated higher-order cascading effects that temporarily destabilized the global economic, financial, and supply chain architecture, but did not fundamentally call it into question.

The current crisis, triggered by Operation "Epic Fury" on February 28, 2026, marks a qualitative systemic breakdown, however. For the first time, the material foundations of the global system itself are under simultaneous attack: energy, water, and food infrastructures, metallurgical and trade-related value chains, and financial transaction systems are all affected at the same time—and this within a geopolitical environment where institutional crisis management mechanisms are already fragmented.

The primary shock is clear: the global market is currently facing a shortfall of approximately 10–13 million barrels of oil per day, while about 20% of global gas exports have been disrupted. These supply disruptions are the initial trigger of the current systemic crisis. According to IEA Director Fatih Birol, the current crisis is "more severe than the crises of 1973, 1979, and 2022 combined." These are the source of the key ripple effects—spilling over into energy prices, fertilizer production, agricultural yields, petrochemical products, industrial manufacturing, and ultimately fiscal and monetary stability. The crisis is thus not only multiplicative but also energy-induced and systemically amplified.

THE FOUR SYSTEMIC GLOBAL CRISES: A COMPARATIVE FRAMEWORK

CRISIS	ORIGIN	PRIMARY CASCADE	RECOVERY PATH	STRUCTURAL OUTCOME
GFC 2007-09	Financial contagion; systemic "too big to fail" (TBTF) banking risk	Credit, trade, unemployment, public debt	Central bank coordination; economic stimulus programs	Global trade did not return to pre-crisis levels until 2016. Systemic risk is embedded in the regulatory framework.
COVID-19 2020-22	Pandemic; systemic biological risk	Supply chain disruptions, labor markets, fiscal and monetary policy	Vaccine technology; liquidity injections	Permanent restructuring of supply chains. Persistent inflation. Acceleration of the digital revolution. Expansion of government capacity.
Russia-Ukraine 2022+	Geopolitical; the resource card	Energy, fertilizers, food; Nuclear risk; European security	Partially: LNG diversification; diversion of fertilizer and food raw materials, no end to the war	European security architecture permanently altered. DragonBear axis consolidated. No peace agreement has yet been reached.

USA-Israel-Iran 2026	Geopolitical; parallel, mutually reinforcing proxy wars—Iran and Ukraine; Choke point closures	Energy (oil and gas), petrochemical products, water, food, metals, finance, nuclear power plants, Governance: simultaneous	**NO VIABLE UNILATERAL RECOVERY PATH IDENTIFIED**	**Global system breakdown threshold. Dual architecture operational. Risk of irreversibility higher than in all three previous crises.**

Table 1 - Quelle: Velina Tchakarova, FACE Intelligence

Global System Rupture

The concept of a global system breakdown is not a metaphor, but a precise analytical category. It refers to a tipping point: the moment when the global system transitions from a tense but still adaptable state to a structurally irreversible fragmentation.

This concept differs fundamentally from classical risk and crisis analysis. The latter implicitly assumes that an affected system retains its central structures and can return to a previous equilibrium once a shock has subsided. Global system collapse, on the other hand, describes the opposite scenario: a state in which multiple simultaneous structural failures exceed the breaking point of the institutional architecture. Once this point is reached, a return to the previous system configuration is no longer possible. The system can then no longer be stabilized, but only replaced.

The possible subsequent states are limited: either a bifurcation of the global system into two competing orders, or the emergence of an unstable, multipolar equilibrium with at least three equally powerful centers of power—alongside the United States and the China-Russia axis.

The theoretical foundation of this approach lies in complexity and systems theory, as well as in the work of Nassim Nicholas Taleb on the dynamics of cascading events in complex systems. Central to this is the recognition that systemic risks do not follow a linear course and largely elude conventional probability models.

Building on this, the simultaneity approach extends this perspective to geopolitical strategic foresight. The focus is on identifying the conditions under which multiple cascade sequences—military, economic, trade policy, fiscal, resource-related (energy and agriculture), water-related, nuclear, and state-institutional—take effect simultaneously and reinforce one another. The decisive point is where these dynamics transition into a closed feedback loop for which no external lever of intervention remains.

The analytical framework aims to capture precisely this state: the moment when the high interconnectedness of the global system reverses its function—and transforms from a factor of stability into an accelerator of systemic destabilization.

The Arteries of the Global System

The functional arteries of the global system are its supply chains. Raw materials, energy, capital, data, and goods flow through them, sustaining the global economy. Disruptions at just a few central hubs can therefore trigger far-reaching global effects.

One of the most important of these chokepoints is the Strait of Hormuz. Under normal conditions, around 20 million barrels of crude oil and petroleum products are transported through it each day—about one-fifth of global oil consumption. In addition, significant quantities of liquefied natural gas (LNG) pass through this route; in particular, about 20% of globally traded LNG originates from Qatar and is predominantly shipped via Hormuz.

In parallel, the Bab el-Mandeb Strait—the southern entrance to the Red Sea—is a second critical chokepoint. Approximately 5 to 6 million barrels of oil and petroleum products pass through here daily, along with a significant portion of global container traffic between Asia and Europe. Disruptions in this corridor often force ships to reroute around the Cape of Good Hope, which significantly increases transport times and costs. A simultaneous disruption of both routes would have systemic consequences. It would not only restrict physical energy flows but also destabilize insurance and transport markets

and exacerbate existing bottlenecks along global supply chains.

Existing alternative capacities are limited. Pipeline connections such as the Saudi East-West Pipeline to the Red Sea or the Abu Dhabi-Fujairah Pipeline can only handle a fraction of the usual transport volumes and are already operating near their technical capacity limits. In the short term, therefore, there is little additional reserve capacity available to fully compensate for major disruptions at sea.

The Schrödinger Phenomenon: Two Systems at the same Time

The most analytically significant structural feature of the current rupture is what the framework refers to as the Schrödinger phenomenon: a state in which two seemingly contradictory systemic realities are simultaneously valid. This is not a transitional phase, but a stable structural duality that continues to intensify.

One example of this is the differing significance of the Strait of Hormuz. For certain actors—such as the United States, which has significantly reduced its energy dependence in recent years—this route is less critical than it once was. For large parts of the global economy, however, it remains a central bottleneck, as a significant portion of global oil and LNG trade continues to pass through this strait. The United States, for example, could declare a military success and conclude that permanent control of the Strait of Hormuz is not strategically necessary. At the same time, however, it would remain confronted with the indirect, difficult-to-control consequences of the crisis—in particular rising energy prices and the resulting inflationary pressure at home.

In parallel, Iran could continue to exert targeted influence over the Strait of Hormuz through asymmetric means, such as temporary disruptions to shipping traffic or attacks on energy infrastructure in the Gulf region. In this way, economic and political pressure could be maintained without having to resolve a direct military confrontation at the conventional level. Both developments are taking place simultaneously—and this is precisely where the structural challenge to the stability of the entire system lies.

On April 8, 2026, the U.S. and Iran agreed to a two-week ceasefire under Pakistani mediation. The Strait of Hormuz has not been open since then; rather, according to the maritime intelligence firm Windward, it remains in a state of supervised pause: ships may only pass with permission from the Iranian Revolutionary Guards. The ceasefire has kept the price of Brent crude oil roughly 35 percent above pre-war levels. On April 11, high-level negotiations took place in Islamabad between U.S. Vice President Vance and Iranian Parliament Speaker Ghalibaf, which ended without an agreement after 21 hours of intense deliberations—the central point of contention was Iran's refusal to abandon the development of nuclear weapons; The U.S. presented its "final and best offer," while Iran, for its part, rejected the U.S. demands as excessive and held out the prospect of continuing talks with both Iran and Pakistan.

This coexistence of contradictory realities is also evident in the structure of global financial and energy systems. In the energy sector, parallel architectures currently exist: the established dollar-based system and growing alternative settlement systems, such as those based on the yuan. Both process the same physical energy flows, but through different institutional channels. The existing system is not being replaced, but rather supplemented by a second one that is gaining significance in certain regions and political constellations.

Similar overlaps can be observed in supply chains. Alongside the formally regulated, multilateral trading system, structures organized around bloc or security policies are increasingly emerging and operating in parallel. These systems not only compete with one another but also partially reinforce each other by redirecting risks rather than eliminating them. This duality is also evident in the technology sector. Strategic decisions—such as those regarding the securing of critical raw materials—are increasingly made in the context of geopolitical competition and have a direct impact on the structure of global value chains.

Analyses that consider only one of these levels therefore fall short. The Schrödinger phenomenon is not merely a difference in perception, but a structural feature of the system itself: multiple logics of order exist simultaneously, overlap, and thereby generate additional instability.

Two Proxy Wars, two Systemic Risks

The so-called DragonBear framework describes Russia and China as actors that operate in a strategically coordinated manner across key systemic domains without entering into a formal alliance. The underlying assumption is clear: In

"Cold War 2.0," the three major powers—the United States, China, and Russia—have no incentive for direct military confrontation. The risk of a nuclear conflict acts as a structural threshold that limits the use of conventional forces between equal adversaries. However, this threshold does not prevent conflicts; rather, it shifts them. Conflicts increasingly take place in the gray zone below the threshold of open warfare—in the form of hybrid warfare. Due to close global interdependence, the effects of such conflicts are significantly more far-reaching today than in earlier eras. The very integration that has enabled economic prosperity also acts as an accelerator for the spread of systemic shocks.

Against this backdrop, the wars in Ukraine and the Middle East are not merely parallel proxy conflicts, but two concurrent systemic risks that reinforce one another. Since 2022—and with significantly increased intensity since 2026—they have shaped the dynamics of the global crisis through multiplicative effects. Both conflict zones are intertwined: they tie up military, economic, and political resources, shift strategic attention, and generate feedback effects across energy, financial, and security structures. Rising energy prices can open up short-term fiscal leeway for individual actors, while at the same time the burden on import-dependent economies increases and industrial value chains come under pressure.

At the same time, a structural asymmetry emerges. Focusing on one conflict zone inevitably reduces the capacity to act in another. Critical resources—such as air defense systems, precision munitions, or logistical capacities—are limited and cannot be deployed in parallel at will. This mutual resource allocation means that the two conflicts do not develop in isolation but reinforce one another. Any additional pressure in one of the two arenas increases the systemic strain in the other—and thereby accelerates the dynamics of the overarching global crisis.

The Triumvirate Framework: The only Viable Solution

The United States, China, and Russia are each reaping short-term benefits from their current positions amid the crisis. The U.S. has weakened Iran's military capabilities and limited its immediate options for nuclear escalation without itself being affected by oil and gas shipments through the Strait of Hormuz. Russia benefits from increased energy revenues, additional geopolitical leverage over Ukraine, and a shift in strategic focus, without being directly involved in military escalation. China, in turn, is strengthening its role in alternative settlement structures, securing energy directly from Iran on favorable terms, and positioning itself for a stronger diplomatic role in a potential post-war order.

These short-term advantages, however, share a common foundation: they merely slow down the response of the U.S., China, and Russia should it come to the coordinated prevention of a systemic breakdown. The underlying cascade—triggered by significant disruptions to energy supplies—propagates simultaneously across multiple levels: rising energy prices, pressure on fertilizer production and agriculture, increasing food insecurity, strain on water-dependent infrastructure, risks to nuclear power plants, and growing fiscal instability in particularly vulnerable economies. This dynamic makes it clear: short-term winning positions are not stable. Once systemic buffers are exhausted, the consequences will affect all actors equally. The system does not distinguish between winners and losers—it reacts to physical and economic limits.

Against this backdrop, a minimum sequence of measures emerges to interrupt the escalation dynamic before it becomes irreversible. First, the United States must open up the political space for de-escalation—this appears to be the case with the current ceasefire and the first phase of peace negotiations. Second, China and Russia must express a shared interest in Iran's stability as a functioning state. This also appears to be the case given the coordinated actions of the two countries at the diplomatic and political levels. Third, any viable solution requires credible security guarantees for Iran, which must be backed by multiple parties—the U.S., China, and a number of middle powers. Fourth, hostilities must be reduced as synchronously as possible, rather than incrementally, to limit mutual mistrust. Fifth, the reconstruction of critical energy and food infrastructure must be an integral part of a comprehensive political agreement and must not be postponed to an indefinite post-war phase.

These steps define the minimum required to interrupt the current cascade. The window of opportunity is limited: agricultural cycles, fiscal stability in particularly vulnerable regions, the functionality of critical infrastructure, and the stability of the global system itself all evolve along their own timelines that cannot be arbitrarily shifted. If this window is missed, the current dynamics risk becoming entrenched—with structural consequences that can no longer be corrected without a fundamental reorganization.

Domain	Primary Risk	Current Status	Critical Tipping Point
Energy	Physical supply shortages	Critical/aktive	Ongoing shortfall of ~10 mbpd
Transportation/ Logistics	Choke point disruptions (Hormuz, Bab el-Mandeb)	Partially impaired	Simultaneous blockage of both routes
Fertilizers	Production and export restrictions	Active	Global supply < minimum agricultural requirements
Agriculture	Crop failures (e.g., Kharif cycle)	Partially irreversible	Missed planting window
Food	Price and supply instability	Increasingly critical	Widespread import shortfalls/ social instability
Water	Dependence on desalination + power outages	Critical	Disruption of basic urban services
Financial System	EM currency stress + refinancing costs	Transition to stress	Loss of market access/payment defaults
National Debt	Fiscal strain	Active in multiple states	Chain reaction of defaults
Security/Military	Stretching of resources (ammunition, systems), attacks on nuclear facilities	Active	Simultaneous shortfalls on multiple fronts, nuclear catastrophe
Institutional Framework	Erosion of global regimes (e.g., non-proliferation)	Already weakened	Irreversible fragmentation

Table 2 - Quelle: Velina Tchakarova, FACE Intelligence Rahmenarchitektur.

Multiplier Cascade Effects

The underlying analytical framework identifies the system's structure, maps the transmission pathways of shocks, defines threshold conditions, and describes a minimally viable exit sequence. What it cannot do, however, is replace the central political decision required to interrupt these dynamics. This decision is the last remaining variable with genuine room for maneuver. All other variables are already in motion: they have either been triggered, are in a critical state, or are moving toward irreversibility. Parts of the agricultural growing window have already irrevocably passed. Institutional orders have lost credibility. At the same time, alternative financial and settlement structures are gaining increasing institutional momentum.

At the present time, the cascade is active simultaneously across a multitude of central system domains. The decisive difference from earlier crises lies not only in the number of affected areas, but in the nature of their interactions: the effects are not additive, but multiplicative. Every deterioration in one domain increases the vulnerability of neighboring areas, and the overall effect accelerates faster than isolated individual analyses can capture. Early warning indicators along key transmission pathways confirm these dynamics. Critical bottlenecks in energy and transportation infrastructure are operating near their capacity limits, insurance and financing conditions have tightened significantly, and initial market segments are showing stress levels last seen during global crisis phases. At the same time, interventions in trade flows are increasing, for example through export restrictions on strategic goods such as sulfur and fertilizers. In parallel, infrastructure risks are intensifying, particularly in energy- and water-dependent regions.

The cascading effects follow a clear, self-reinforcing logic: disruptions in energy supply immediately increase production and transportation costs. This leads to bottlenecks in energy-intensive sectors such as fertilizer production, which in turn impairs agricultural yields. As a result, food prices rise, while fiscal pressure on import-dependent economies increases. This dynamic continues across further levels. Strains on the energy supply directly affect water-dependent infrastructure, particularly in

regions with high reliance on desalination. Financial tensions further amplify these effects, for example through rising refinancing costs, capital outflows, and currency pressure in vulnerable economies. Each of these effects is manageable when viewed in isolation. When they occur simultaneously, however, they reinforce one another and generate accelerated systemic dynamics. Several thresholds have already been crossed, and key windows of opportunity for adaptation are beginning to close.

This development is no longer a hypothetical possibility. It describes a state that has already come to pass: the transition from potential risks to actual systemic shifts.

The Agricultural Calendar doesn't Negotiate

Of all the cascading transmission pathways, the most time-sensitive and irreversible is the one leading from fertilizers to food production—driven by the agricultural calendar.

The Kharif planting season in South Asia—crucial for rice, cotton, and legumes in Bangladesh, Pakistan, India, and Nepal—is tied to a narrow window of time during which fertilizers must be available. This window is currently closing. In Bangladesh, fertilizer reserves stood at only about eleven days' worth at the end of March and have not recovered significantly since then. Much of the production capacity remains constrained due to insufficient LNG supplies. In Pakistan, nitrogen fertilizer production has been significantly reduced compared to seasonal normal levels. India is increasingly drawing on strategic reserves to cushion short-term shortages.

The Farming Calendar knows nothing of Politics

The key point is this: The agricultural calendar follows physical and biological cycles, not political timelines. Even if energy supplies and transportation routes stabilize in the short term, the effects will persist. The consequences will become apparent with a time lag, but they will almost certainly materialize. Starting in the third quarter of 2026, a significant escalation of food security risks is to be expected—regardless of when the current conflict ends or how quickly critical transport corridors are reopened.

Irreversibility: When Food Security Collapses

This is the most far-reaching form of irreversibility within the cascade: a physical reality that cannot be reversed by financial instruments, political measures, or military action. This trend is already reflected in international projections. The United Nations World Food Programme anticipates a significant increase in the number of people affected by food insecurity. The dynamics are particularly alarming: the number of people at acute risk has increased significantly within a short period of time.

The scale is not changing gradually, but in leaps and bounds. This is the aggregate human cost of multiplicative cascade effects—triggered by interconnected disruptions of the second, third, and higher orders in the global system.

The Strait of Hormuz as a Fault Line

The Strait of Hormuz is not merely an energy chokepoint. It is a fault line in global supply chains.

This crisis is not simply another regional conflict. It is a simultaneous shock to several closely interlinked systems. The perspective presented here is that of physical supply chains. For if the geopolitical significance of this crisis stems from the simultaneity of multiple systemic shocks, then its economic significance lies in the way these shocks manifest themselves multiplicatively through real supply chains—commodity by commodity, bottleneck by bottleneck, week by week.

From Price to Availability

The Strait of Hormuz is usually discussed in the context of oil. That is true, but it does not tell the whole story. What we are currently witnessing is not merely a price shock in energy products. It is a simultaneous breakdown of multiple commodity and intermediate product chains, with a structural delay in recovery.

By day 35 of the analysis, six out of eleven monitored chains were already experiencing physical shortages: crude oil, LNG/gas, naphtha, aluminum, methanol, and kerosene. Four additional chains are approaching their critical zones in quick succession: helium, urea, diesel, and subsequently semiconductors. Even under a more favorable scenario, the median date for the corridor's full commercial reopening is not until day 140—around mid-July.

This is not a point prediction, but the midpoint of a range. And even this timeframe refers only to the logistical and commercial resumption of traffic—not to the restoration of physically damaged infrastructure. If key facilities have been severely damaged, reconstruction will take considerably longer.

The crucial analytical error made by many observers is to view the crisis solely as a price event. In reality, it unfolds in two interconnected dimensions: price and availability. First, prices rise. That is the system's most visible reaction. Shortly thereafter, physical availability deteriorates because transportation becomes more uncertain, inventory levels drop, and intermediate goods become scarcer. And it is precisely this declining availability that exacerbates price pressures once again. A price shock thus becomes an availability problem, and the availability problem becomes an even sharper price shock. **Those who look only at markets see only the surface. The deeper movement is taking place in physical availability.**

Three Waves of the Crisis

This dynamic unfolds in three waves:

The first wave is a combination of threat, price shock, and logistical uncertainty. As soon as the risk of attacks, mines, or military incidents becomes credible, war-risk premiums rise, shipowners and charterers become more cautious, and insurers either withdraw coverage or demand significantly higher premiums. The key factor is causality: It is not insurance companies that create the shock, but rather the perceived physical danger that creates the shock first—and the withdrawal of insurance coverage amplifies it. In this phase, prices typically rise faster than the visible physical disruptions. At the same time, logistical friction increases: Routes become riskier, transport more expensive, and ships and capital more cautious.

The second wave is that of feedstock depletion and industrial availability. Now, not only are inventories and buffers shrinking, but materials are becoming physically scarce for relevant buyer groups. Helium, urea, and diesel are entering this critical zone in close succession—helium in the first half of April, urea around the middle of the month, and diesel in the latter part of the month through the first half of May. These dates do not describe exact daily forecasts, but rather the time windows in which tension turns into actual scarcity.

The third wave becomes visible when the preceding waves reach end customers. Only then does the crisis manifest in production data, scarce goods, hospital operations, reduced flight schedules, or bottlenecks in end products. **For the public, the crisis often begins only at this point. For the supply chain itself, however, the cause lies many weeks in the past. When the third wave becomes visible, the focus is no longer on prevention, but on prioritization, rationing, and damage control.**

Physical Shortage leads to Rationing

This is precisely where another reality—one that is often underestimated—comes into play: In the face of physical scarcity, resources are allocated (rationed). As soon as materials, energy, or transport capacity are no longer sufficient for everyone, the market ceases to distribute resources neutrally. A de facto hierarchy of needs then takes hold. Critical infrastructure, defense, healthcare, government priorities, and strategic industries are given preference. Other sectors are pushed to the back of the line. **A physical shortage therefore means not only "less for everyone," but often "still enough for some—and too little for others."** This creates, within the same crisis, prioritized sectors that are supplied and neglected normal markets. This further intensifies the pressure on all non-prioritized industries.

Why Simultaneity Changes Everything

Perhaps the most important point of this analysis, however, is another: it is not the sum of individual disruptions that matters, but their simultaneity. An industry can often still compensate for a single bottleneck—through inventory, price markups, substitution, rationing, or prioritization. What it can only compensate for to a very limited extent is the simultaneous occurrence of multiple bottlenecks within the same operational window. This is precisely where the dynamics shift. **Above four simultaneously broken chains, the cascades begin to have a multiplicative (self-reinforcing) rather than an additive effect. Above six simultaneous breaks, the total damage becomes materially greater than the sum of the individual damages.**

In our model, Day 42—that is, April 10—marks this inflection point (the mean of a probability distribution). This is a planning threshold: From that point on, most simulation paths show six or more simultaneous disruptions. After that, countermeasures primarily address symptoms, not causes.

This is also why many countries will misread the crisis. They look at reserves and infer security from them. But reserve levels alone do not determine resilience. What matters is the structure of exposure.

A closer look at existing buffers and exemptions makes this clear: In addition to joint strategic reserves, there are national stockpiles of varying depths, as well as selective

transit corridors and special regulations that distribute the shock unevenly across countries and industries. Therefore, there is no single global supply situation, but rather very different national crisis profiles.

Bangladesh and Pakistan tip over early; South Korea appears cushioned regarding crude oil but then potentially slides into crisis via naphtha; Taiwan is exposed through helium and chip manufacturing; Europe suffers immediately from prices and later from winter storage replenishment, while China is in a better strategic position due to exemptions and floating storage. Reserve levels are thus only one variable. The structure of dependency is at least as important.

Hidden Dependencies in Supply Chains

Anyone who wants to understand this crisis must also understand the hidden interdependencies. One of these key factors is LNG. **In an analysis of interdependencies, LNG has the highest dependency score among other raw materials and petrochemical feedstocks.** This makes sense: LNG is not only a source of energy, but also a feedstock for methanol and urea, an energy source for aluminum smelting, and the basis for the byproduct helium. If LNG supply is disrupted, multiple chains are affected simultaneously. This is precisely why the crisis is not unfolding linearly but is destabilizing multiple industrial levels in parallel.

The second hidden dependency can be found in the semiconductor supply chain. The well-known risk is helium. Less well known is that force majeure declarations at ADN, HMD, and adipic acid have opened a second pathway: nylon 6,6. This material is used in FOUP wafer carriers—that is, where wafers are moved within the production flow of major semiconductor manufacturers. The analysis shows that a failure of this channel can significantly accelerate the onset of semiconductor stress, causing it to take effect sooner than the more well-known helium pathway alone would suggest.

The third hidden link lies between urea and diesel—and it is possibly the most underestimated. Heavy-duty diesel trucks require AdBlue, a urea solution, to operate their SCR systems. No AdBlue means trucks come to a standstill. At the same time, agriculture itself runs on diesel—as does the fertilizer application process. A urea shortage thus slows down transportation. A diesel shortage prevents fertilizer application and harvesting. When these two timeframes overlap, the food supply chain faces a multiplicative impact.

Another key issue is how to recognize early enough that the shock is materializing. Here, too, risk analyses provide important insights: The speed at which force majeure declarations are issued serves as a very early indicator of actual physical disruptions. In the case of the naphtha supply chain, the peak in FM declarations occurred precisely during the time window in which the model predicted the disruption. Furthermore, actual production force majeure events in Europe occurred several days earlier than initially expected in the analyses. **For Wave 2 and Wave 3, this means: Those who wait for official or institutional summaries are systematically too late. Those who want to stay ahead must directly monitor the right early warning indicators.**

Reopening is not the same as Recovery

This brings us to another misconception: that a ceasefire equals a reopening. This assumption is fundamentally flawed. **Five sequential phases should be modeled before full commercial normalization is possible: mine clearance, the return of insurance and reinsurance capacity, fleet clearance, port clearance, and a schedule reset.**

This results in a window of four to eight months, with a median of around day 140 for commercial reopening. But these 140 days describe only the logistical-commercial part of the recovery. They say nothing about how long it will take to repair physical damage to facilities, export terminals, liquefaction infrastructure, or smelting capacity. When major energy or industrial facilities are damaged, reconstruction and recommissioning take place over entirely different time frames. Logistical reopening is therefore not the same as economic or industrial normalization.

Multiple Physical Deadlines

This is precisely why decision windows are so important. The analysis highlights that several physical deadlines will expire within a matter of days: helium contracts for medical care, LPG substitution in European crackers, a joint European helium procurement initiative, the preliminary decision on allocation between MRI systems and semiconductor manufacturing, the activation of cross-sector response protocols, and finally, emergency procurement of urea. These are not political preferences,

but physical and logistical deadlines. Once they expire, measures will either become impossible, much more expensive, or ineffective for the 2026 planning horizon.

What Limits the Analysis

Of course, this model also has its limitations. It likely overestimates the absolute severity to some extent, partly because the destruction of demand is not fully accounted for. There are also uncertainties regarding duration and scenario development. At the same time, the direction is robust. The analysis demonstrates high directional accuracy, a largely physically grounded force majeure basis, and clearly identifies which signals would alter the assessment of the situation. Therefore, anyone who assesses the situation more optimistically should specify exactly which physical mechanism would relieve the pressure on the system.

Interim Conclusion

Currently, virtually all early warning indicators of this transition have been triggered or are in the critical range. The implications are threefold: First, this crisis is structurally unprecedented and cannot be managed using the tools employed in previous crises. Second, while a global systemic breakdown remains a hypothetical scenario, it could become a reality as we approach an imminent tipping point. Third, stabilizing the system requires coordinated geopolitical intervention by the United States, China, and Russia. Such coordination has so far failed to materialize, as all three actors have short-term strategic incentives to externalize adjustment costs and postpone decisions—until the systemic buffers are irreversibly exhausted. In this context, the middle powers play a key operational role. They are the only actors capable of taking immediate action to ensure functional stability: by establishing resilient dialogue frameworks and by actively stabilizing critical flows of goods and raw materials—particularly energy resources, fertilizers, and food. Without these interventions, the current crisis will most likely deepen and accelerate along existing cascading pathways.

1. This crisis is not merely an energy shock. It is a supply chain shock involving multiple simultaneously disrupted chains of raw materials and intermediate products.
2. The real danger lies not in individual bottlenecks, but in their overlap.
3. Price and availability must always be considered together.
4. Physical bottlenecks are almost always followed by allocation—and thus an implicit hierarchy of needs.
5. A ceasefire does not automatically end the recovery cycles of insurance, logistics, chemicals, agriculture, and industry.
6. Even when commercial passage is restored, physical damage to infrastructure can continue to limit real-world recovery for a long time.

This is precisely the real lesson of Hormus. Geopolitics is often described as a projection of power. In reality, it is decided in the material world: in port windows, in inventory levels, in feedstocks, in insurance coverage, in fertilizer application, in carrier gases, in flight schedules, and in the question of which chains break simultaneously.

This article explains why this crisis is systemic. The supply chain perspective shows how this systemic nature translates into the real economy. And this translation is relentless. Because physical systems do not negotiate. They function—or they collapse.

Why We Should Now Let Go of the Illusion of Control and Act Decentrally

The global systemic breakdown is like a tsunami: the "receding tide" manifests itself in the form of price increases and shipping delays. Yet in the background, massive waves are already building up—waves that often go unrecognized. Due to a lack of practical experience, these faint signals are frequently misinterpreted. Especially in complex environments, strong signals often come too late, partly because the delayed effects are underestimated.

The Pitfall of Linear Thinking in Complex Systems

In highly interconnected systems, too many positive feedback loops lead to unpredictable emergent effects. Small causes can have enormous and unforeseeable consequences. With our linear "either-or" thinking, we systematically underestimate the potential for harm posed by such network effects. Furthermore, collapse in complex systems is not a flaw, but a design feature intended to bring about renewal. Due to a lack of experience, we tend to turn a blind eye and fail to recognize phase transitions that have already occurred.

Pure resilience, as the term is often translated, therefore falls significantly short in this crisis. We should use these disruptions to adapt to rapidly changing conditions and to grow, which requires a willingness to adapt quickly.

Measures aimed at combating symptoms, such as a cap on fuel prices, obscure problems and narrow the window for adaptation. We therefore need a shared new understanding of reality. Further obfuscation or downplaying only reduces our scope for action. This applies not only to organizations and companies, but also to the general public. People can handle the truth, even if we currently have only a very vague picture of it. False security and illusions of safety certainly do not contribute to a resilient and adaptable society.

Even if potential supply shortages in Europe affect us less severely than countries in Asia or Africa, we will almost certainly feel the consequences through indirect effects such as supply disruptions, economic and social upheaval, rising inflation, or potential refugee movements. The sooner we prepare for this, the easier the adjustment will be.

Create Breathing Room and a Buffer

To cope with the growing uncertainty, we must above all create room for maneuver and build in buffers. This means defining new priorities and drastically reducing bureaucracy and other measures that do not contribute to addressing current and anticipated problems. In many areas, a special short-term organizational structure is also needed to establish an early warning system and to be able to respond to changes at an early stage. At the same time, material buffers should be built up wherever possible.

Possible Strategies for the Economy

Maintaining critical infrastructure and essential services is now the top priority. This will also require prioritization if full capacity can no longer be maintained or supply chains fail. In the event of physical shortages, rationing must be implemented quickly. The better we prepare for this, the fewer unforeseen and unanticipated consequences there will be.

Other companies should also establish an early warning system and prepare for potential rationing and supply chain disruptions. This is best done through cooperation to use scarce resources more effectively and efficiently. The 4K rule ("Know competent people in a crisis") applies now more than ever, and these networks should be established now at the latest.

Population

It is now particularly important to engage the public and prepare them for a difficult period. The closer the actual crisis events come, the less room for maneuver there will be. On the one hand, this involves general individual preparedness to compensate for short-term and temporary supply disruptions. On the other hand, it involves mental preparation for a prolonged crisis phase, as well as support to better cope with the expected feelings of powerlessness and helplessness. Above all, this requires decentralized self-help networks. After all, the state and its structures will not be able to resolve the consequences of these upheavals. We are all the state, and we can only achieve this together. The antidote to powerlessness is self-efficacy, which must be lived out individually, collectively, and locally.

Outlook: Confidence Through Self-Efficacy and Adaptation

We cannot control how long these external shocks will last. What we can control, however, is our willingness to adapt and our shared determination to shape a positive future. This requires not just fine words, but concrete action.

We will certainly need patience, frugality, and confidence, for even such low points will pass. Adapting early, therefore, mitigates later hardships. The longing for the old, comfortable stability is understandable, but it will not return in that form. Yet the future does not simply happen on its own. We can actively help shape everything that lies within our sphere of influence. Let's try to do that together!

Autors

Velina Tchakarova: www.linkedin.com/in/velinatchakarova | www.foraconsciousexperience.com

Marco Felsberger: www.linkedin.com/in/marco-felsberger-resilience-and-risk-expert | www.resilience-engineers.com

Herbert Saurugg: www.linkedin.com/in/herbert-saurugg | www.saurugg.net