THE BARNWELL ADVISORY GROUP

Strategy & Advisory Consulting

WHITE PAPER

Geopolitical Risk & Supply Chain Resilience

Building Strategic Resilience Without Sacrificing Competitive Efficiency

Published: Q2 2026

Author: Dwayne C. Barnwell | The Barnwell Advisory Group

Sources: 60+ cited, IMF, McKinsey, BCG, WTO, WEF, Oliver Wyman, Deloitte, OECD

Read time: ~18 minutes

82%
of companies report supply chains affected by geopolitical disruption in 2025

50%
drop in Suez Canal transits in early 2024 due to Red Sea regional conflict

30%
of annual EBITDA lost to supply chain disruptions over a decade in consumer products

2%
of executives with full visibility into their Tier 3 and beyond supplier base

barnwelladvisorygroup.com | dwayne@barnwelladvisory.com | +1.281.643.8652

© 2026 The Barnwell Advisory Group | Confidential

Contents

Executive Summary

The End of the Frictionless Supply Chain Era

Mapping the Geopolitical Risk Landscape

Why Efficiency-Only Models Break Down

Sector-Specific Exposure and Sensitivity

Resilience Without Waste: The Core Tradeoff

Structural Strategies Organizations Are Using

Procurement, Category Strategy, and Supplier Management

Digital Visibility, Scenario Planning, and AI

Governance, Leadership, and Geopolitical Muscle

Four Blueprints: How Leaders Are Responding

Failure Modes and Overreactions

A Practical Roadmap for Leaders

Three Decisions Only the CEO and COO Can Make

Executive Action Checklist

Selected Sources

About the Author

© 2026 The Barnwell Advisory Group | Confidential

Executive Summary

The global trade landscape is undergoing its most significant structural transformation since the end of the Cold War. For three decades, the prevailing doctrine was frictionless globalization, optimizing supply chains for lowest landed cost, concentrating production in the most efficient geographies, and trusting that open trade rules would remain permanent. That era is over.

Today's operating environment is defined by geoeconomic fragmentation, a phenomenon where trade and investment flows are increasingly bifurcated along geopolitical lines. The convergence of the COVID-19 pandemic, the Russia-Ukraine war, escalating tensions in the Taiwan Strait, and the systemic U.S.-China rivalry has created a "polycrisis" that has exposed the structural brittleness of single-source, efficiency-first supply chain models.

Leading organizations are recognizing that the old efficiency-first model created "brittle efficiency." In sectors from semiconductors to pharmaceuticals, over-reliance on single-region sourcing has translated directly into revenue loss and margin erosion. This analysis details the strategies required to build resilience without waste, moving beyond generic nearshoring commentary to explore a "cost of resilience" operating model that delivers both agility and competitiveness.

The transition requires a holistic redesign across four pillars: network footprint, procurement strategy, digital orchestration, and governance. This report provides a practical, evidence-based roadmap for CEOs, COOs, and Boards to navigate this new era, outlining how to move from a reactive posture to one of anticipatory offense, turning geopolitical disruption into a source of competitive differentiation.

The End of the Frictionless Supply Chain Era

For the better part of thirty years, global supply chains were optimized for a world that no longer exists. The assumption that the global trade regime would remain open, predictable, and governed by rules-based institutions underpinned trillions of dollars of investment decisions. The just-in-time model, lean inventory management, and single-source concentration were rational responses to a stable geopolitical environment. The collapse of these assumptions demands a fundamental strategic reset.

Trade policy has returned to the center of national strategy. The rise of industrial policy, exemplified by the U.S. CHIPS and Science Act, the Inflation Reduction Act, and the EU's Carbon Border Adjustment Mechanism, marks a significant departure from the free-trade consensus. For 2025, 82 percent of surveyed companies report that their supply chains are affected by geopolitical tensions, a figure that has tripled since 2020. The re-politicization of trade means supply chain leaders can no longer view trade barriers as temporary anomalies.

Defining the New Terms of Engagement

To navigate this environment, leaders must distinguish between several frequently conflated concepts. The current movement is not a simple retreat from global trade, but a sophisticated reordering of trade flows along lines of political alignment, regulatory compliance, and national security.

Concept	Definition	Strategic Implication
Geoeconomic Fragmentation	Trade and investment flows reshaped by political and national security considerations, creating competing economic blocs	Multi-polar sourcing networks required; single-source dependence on rival blocs is a strategic liability
Friendshoring & Nearshoring	Relocating supply chain nodes to geographically proximate or geopolitically aligned countries to reduce coercive risk	Mexico, Vietnam, India, Poland, and Morocco are primary beneficiaries; USMCA compliance critical for North America
Local-for-Local Production	Building manufacturing capacity within the market it serves, decoupling regional supply chains from global volatility	Requires higher capital investment but eliminates cross-border tariff and logistics risk; Tesla's Gigafactory model
Reglobalization	Trade patterns becoming more diverse and inclusive but governed by higher regulation and political alignment requirements	Trade volumes are not shrinking but routing is changing; compliance costs and regulatory complexity are rising sharply
Anti-Fragility	The capacity for a supply chain to not only withstand shocks but to improve and find competitive advantage through volatility	The strategic aspiration: turn supply chain resilience into a moat by outpacing competitors in adapting to disruption

© 2026 The Barnwell Advisory Group | Confidential

Mapping the Geopolitical Risk Landscape

The current geopolitical risk landscape is multifaceted, ranging from maritime chokepoints to the weaponization of critical minerals. For supply chain strategists, the challenge is to quantify how these risks translate into operational and financial exposure, and to build a monitoring capability that turns geopolitical intelligence into proactive supply chain decisions.

Risk Category	Key Manifestations	Supply Chain Impact
Great Power Competition	U.S.-China bifurcation; export controls on semiconductors, AI chips, and advanced manufacturing equipment; tariffs up to 145%	Trade in goods between geopolitically distant blocs declining 12-15%; firms with China-only sourcing face strategic exposure
Maritime Chokepoints	Red Sea crisis: 50% drop in Suez Canal transits (2024); Hormuz handles ~33% of global nitrogen fertilizers and 25% of seaborne oil	Asia-Europe transit times extended 10-14 days; war-risk insurance premiums surge 0.2%-7.5% of hull value; JIT schedules disrupted
Critical Minerals & Technology	China 2024 export restrictions on gallium and germanium (inputs for semiconductors, fiber optics, and solar panels)	Weaponization of mineral supply chains; firms without diversified critical mineral sourcing face production halts and margin compression
Cyber Conflict	State-sponsored attacks on logistics providers, port operators, and ERP systems; NotPetya-type supply chain attacks increasing	Digital supply chain infrastructure is an attack surface; firms without cyber resilience plans face compounding operational disruption
Industrial Policy Shifts	U.S. CHIPS Act ($52B), Inflation Reduction Act, EU CBAM, USMCA content thresholds forcing supply chain restructuring	Regulatory compliance now a sourcing constraint; non-compliant supply chains face tariff exposure and subsidy exclusion

© 2026 The Barnwell Advisory Group | Confidential

Why Efficiency-Only Models Break Down

The traditional supply chain model was built on assumptions that have been systematically invalidated. Optimization based solely on "lowest landed cost" failed to account for the tail risks of concentration, the compounding cost of disruption, and the strategic vulnerability created by supplier dependence on geopolitically unstable regions. The financial consequences are now quantifiable: in the consumer products sector, disruptions equal roughly 30 percent of one year's EBITDA over a decade.

A major cause of failure is the "visibility gap." While nearly half of executives understand their Tier 1 risks, only 2 percent have visibility into Tier 3 and beyond. This gap means that most organizations do not know where their most critical vulnerabilities lie until a disruption has already materialized. The result is a reactive, crisis-management posture rather than the anticipatory offense required in today's environment.

The Failure of Traditional Optimization Assumptions

Four structural failure modes define why efficiency-only models collapse under geopolitical pressure:

Failure Mode	Root Cause	Financial Consequence
Single-Source Concentration	Cost optimization driven by lowest unit price; geographic concentration in one or two countries for entire categories	Production halts when primary source disrupted; 30% of annual EBITDA at risk in consumer products over a decade
Tier 3+ Blindness	Only 2% of executives have Tier 3 visibility; sub-tier risks invisible until they cascade into primary disruptions	Chip shortage of 2021-2022 originated at Tier 3 chemical suppliers, not Tier 1 semiconductor manufacturers
JIT Without Buffers	Zero safety stock, no dual sourcing, no buffer inventory in volatile categories; designed for stability not volatility	Days of disruption translate to weeks of recovery; automotive plants idle at $1M+ per day when parts fail to arrive
Geopolitical Naivety	Trade barriers treated as temporary anomalies; no scenario planning for geopolitical escalation or export control regimes	Firms caught by CHIPS Act export controls, Russia sanctions, and Xinjiang supply chain regulations faced instant non-compliance costs

© 2026 The Barnwell Advisory Group | Confidential

Sector-Specific Exposure and Sensitivity

Geopolitical risk affects different industries with varying degrees of intensity, driven by the strategic importance of their products and the geographic concentration of their supply bases. Four sectors face the most acute near-term exposure.

Sector	Key Exposure	Primary Risk Driver	Strategic Response
Semiconductors & Electronics	90%+ of leading-edge chip manufacturing concentrated in East Asia (TSMC Taiwan)	Taiwan Strait tensions; U.S.-China export controls; CHIPS Act compliance	Intel/TSMC domestic fabs; $52B CHIPS Act investment; diversification to Japan and Germany
Pharmaceuticals & Healthcare	90% of U.S.-prescribed drugs rely on API production in China and India; generic sterile injectable shortage risk	Single-source API dependence; BIOSECURE Act restricting Chinese pharma partnerships	Reshoring API production; dual-sourcing critical generics; U.S./EU domestic manufacturing investment
Aerospace & Defense	Industrial capacity crisis: surging demand from global conflicts meets labor shortages and material dependencies	Titanium from Russia; rare earth magnets from China; specialty alloys from conflict-adjacent regions	Domestic titanium processing investment; ally-nation sourcing agreements; defense industrial base expansion
Automotive & Energy	USMCA demands 75% North American content; EV battery supply chains dependent on Chinese lithium processing	Lithium, cobalt, and nickel sourcing; Chinese dominance in battery cell manufacturing (CATL, BYD)	Tesla Giga Mexico; U.S. automaker lithium mine investment; LFP battery chemistry to reduce cobalt dependence

© 2026 The Barnwell Advisory Group | Confidential

Resilience Without Waste: The Core Tradeoff

The central strategic challenge for CEOs is building resilience without simply adding cost and redundancy everywhere. Resilient supply chains are not necessarily "bloated" supply chains; they are "flexible" ones. The critical distinction is between redundancy and resilience: redundancy is holding more of everything, more inventory, more suppliers, more warehouses. It is an expensive, static form of protection. Resilience is the capacity to absorb stress and recover critical functionality through flexibility, adaptability, and anticipation.

Leading firms are adopting a "cost of resilience" model that delivers both competitiveness and agility. The key insight is that resilience investments can be precisely targeted at the highest-risk, highest-impact nodes in the supply chain, rather than applied uniformly, which leads to waste and margin destruction.

The "Cost of Resilience" Operating Model: Six Core Moves

Strategic Move	Description	Implementation Example
Geographic Footprint Reconfiguration	Developing manufacturing and sourcing footprints in geopolitically neutral "connector" countries that bridge competing blocs	Mexico (USMCA bridge), Vietnam (China + 1 hub), Morocco (EU-Africa connector), Indonesia (ASEAN neutral)
Selective Multi-Sourcing	Dual sourcing as a minimum viable standard; tri- or quad-sourcing for critical "bottleneck" categories	Apple moving from single-source China to India + Vietnam assembly; maintaining China for domestic Chinese market
Modular Product Design	Designing products so critical parts can be substituted without total redesign, enabling component flexibility	Tesla redesigned software during chip shortage to use more available microcontrollers, avoiding production halt
Supply Chain Brokering	Leveraging large contract manufacturers with factories in both East and West to shift production as geopolitics demand	Foxconn and Pegatron dual-footprint model; Flextronics multi-region manufacturing network
Local-for-Local Structures	Dedicating production specifically to the market it serves, insulating regional supply chains from cross-border friction	Tesla Gigafactory Shanghai (90%+ local content); BMW Leipzig and Spartanburg serving European/U.S. markets respectively
Collaborative Joint Ventures	Forming JVs with peers to achieve economies of scale in shared factories, reducing individual capital burden of expansion	GM-LG Energy Solution Ultium battery JV; Ford-SK On BlueOval SK battery manufacturing partnership

Structural Strategies Organizations Are Using

The shift from a global, single-sourced network to a multi-polar, resilient footprint involves four strategic archetypes. Leading organizations are not choosing one; they are deploying a portfolio of strategies mapped to the risk profile of each product category and region.

The "China + 1" Strategy is the most common response to U.S.-China tension. Companies maintain Chinese operations to serve the massive domestic Chinese market but build a secondary hub in Vietnam, India, or Mexico. Apple's aggressive expansion of assembly in India and Vietnam, targeting 25% of iPhone production outside China by 2025, is the defining case study. The strategy is not about exiting China but about eliminating single-source dependence on it.

Nearshoring and Regionalization. Mexico has become the primary beneficiary of U.S. nearshoring, with foreign direct investment surging 40% in 2023. Tesla's Giga Mexico is strategically designed to create a North American production hub utilizing USMCA to bypass tariffs. For European firms, Poland, Morocco, and Eastern Europe are the primary nearshoring destinations.

Vertical Integration and Strategic Buffering. In critical categories like battery minerals and high-end semiconductors, firms are moving back toward vertical integration. U.S. automakers are investing directly in lithium mining to secure a stable supply of EV battery materials. Intel's $20B Ohio investment represents domestic vertical integration in response to geopolitical risk.

Leveraging "Connector" Countries. Connector countries, Mexico, Indonesia, Vietnam, Poland, and Morocco, are emerging as the new hubs of the global trade system. These are nonaligned economies that serve as bridges between rival blocs, offering access to both Western preferential trade agreements and Asian manufacturing ecosystems. Firms that establish early footholds in these connectors gain sustained competitive advantage as fragmentation deepens.

> *"The organizations winning in this environment are not the ones that predicted every disruption. They are the ones that built the structural flexibility to absorb disruptions they never anticipated."*

Procurement, Category Strategy, and Supplier Management

In the new environment, procurement must transition from a transactional "price-first" function to a strategic "risk-adjusted" one. The core framework is a four-quadrant category segmentation model that maps spend based on technological complexity and sourcing flexibility, enabling differentiated risk management strategies by category.

The Risk-Adjusted Category Strategy Framework

Category Type	Characteristics	Risk Profile	Sourcing Strategy
Premium Protection	High-tech items where security and regulatory compliance are paramount (e.g., defense electronics, classified components)	Export control risk; adversary access risk; IP theft risk	Onshoring; ally-nation-only sourcing; accept higher cost to secure quality and compliance
Resilient Efficiency	Basic components (e.g., fasteners, standard packaging) where cost matters but resilience is achievable through diversification	Geographic concentration risk; moderate disruption impact	Diversified supplier base across multiple low-cost regions; maintain cost discipline through competition
Risky Specialty	Proprietary high-tech products with limited sourcing options (e.g., advanced semiconductors, specialty chemicals)	Single-source risk; critical for production; long lead times; high disruption cost	Exclusive long-term partnerships; priority access agreements; demand planning integration with supplier
Fragile Competitiveness	Low-cost items with minimal backup sources where resilience requires active supplier development	Deceptively high disruption risk; often overlooked in risk assessments	Actively develop alternative suppliers in different regions; invest in qualification ahead of disruption

Geopolitical Risk Scoring in Supplier Selection. Leading Chief Procurement Officers are integrating geopolitical risk scores into supplier evaluation matrices, assessing not just the supplier's headquarters location but their entire production and procurement footprint. The scoring weights three dimensions: geographic concentration (Does the supplier produce in a single country or multiple countries?), Tier 2+ visibility (Can the supplier demonstrate transparency into their own supply base?), and financial and cyber health (Is the supplier resilient to economic shocks or digital attacks?).

© 2026 The Barnwell Advisory Group | Confidential

Digital Visibility, Scenario Planning, and AI

The complexity of modern supply chains exceeds the capacity of manual monitoring. Digital tools are the essential "radar" for navigating geopolitical friction. By 2025, roughly 50 percent of large global enterprises will have deployed next-generation supply chain control towers that connect internal ERP data with external signals including geopolitical alerts, weather forecasts, port congestion data, and IoT tracking.

Digital Twins and Simulation. Digital twins allow firms to simulate their entire supply chain in a virtual environment, running stress tests for port closures, key supplier failures, or tariff escalation scenarios. The leading application is pre-positioning: firms that ran tariff escalation scenarios in 2023 were able to front-load inventory and lock in pre-tariff pricing, delivering immediate margin protection.

AI-Powered Risk Intelligence. AI platforms are now capable of aggregating news, regulatory feeds, satellite imagery, and shipping data to provide quantified impact scores for geopolitical events. These tools can automate the monitoring of policy changes across 150+ countries and translate geopolitical signals into supplier-level risk scores, enabling procurement teams to act before disruptions materialize rather than after.

> *"The era of frictionless globalization is over. The question is no longer whether to build resilience, but how to build it without destroying the efficiency that made you competitive."*

Governance, Leadership, and Geopolitical Muscle

Resilience is not just an operational challenge; it is a governance one. Organizations must build the capability to turn geopolitical awareness into strategic action, a concept known as "geopolitical muscle." This requires structural changes at the board level, the executive level, and within the organization's operating model.

The Role of the Board. Geopolitical risk is now a top-tier board concern. Boards must move beyond receiving reactive management updates to actively guiding geostrategy. Leading boards are conducting competency reviews to assess whether directors have diplomatic, policy, or regional expertise, a capability that was rarely required before 2020. The proportion of boards that participate in tabletop geopolitical scenario exercises has tripled since 2021.

Building a Geopolitical Operating Model. Firms are adopting three archetypes: a Nerve Center (a centralized unit that coordinates all geopolitical inputs across legal, tax, and supply chain), a Watch Tower (a function dedicated to horizon scanning and monitoring), or Distributed Ownership (where each business unit manages its own geopolitical risk). Regardless of the model chosen, proximity to the CEO and Board is critical to ensure that geopolitical insights influence capital allocation and strategic planning decisions.

© 2026 The Barnwell Advisory Group | Confidential

Four Blueprints: How Leaders Are Responding

Case studies from technology, automotive, semiconductors, and pharmaceuticals illustrating how leading organizations are executing supply chain resilience strategies.

Apple / Technology

25% of iPhone production targeted outside China by 2025, up from near-zero in 2020

China + 1 Footprint Redesign

Apple historically mastered "China efficiency" with 95%+ of iPhone assembly in China. Geopolitical pressure and COVID disruptions forced a strategic pivot. Apple aggressively expanded assembly in India (Foxconn Chennai, Tata Electronics) and Vietnam. The strategy maintains China for the domestic Chinese market while eliminating single-source dependence for global supply. The model: parallel production infrastructure in three geographies, each capable of serving distinct regional markets.

"We didn't stop using China. We stopped depending on only China."

Tesla / Automotive

90%+ of Gigafactory Shanghai components sourced locally, insulating against tariffs and trade policy

Localization for Resilience and Margin

Tesla's Gigafactory strategy is built on "accelerated localization." Gigafactory Shanghai achieves 90%+ local content, insulating against tariffs and serving the Chinese market directly. Giga Mexico creates a North American production hub within USMCA, bypassing tariffs and leveraging preferential content rules. Tesla also redesigned EV software during the 2021 chip shortage to substitute available microcontrollers, demonstrating modular design as a resilience lever.

"Local-for-local production is not a cost, it's strategic insurance against geopolitical risk."

Intel / Semiconductors

$8B in CHIPS Act funding to rebuild domestic U.S. semiconductor manufacturing capacity in Ohio and Arizona

Rebuilding Domestic Capacity

Intel's investment in Ohio and Arizona, supported by $8B in CHIPS Act funding, represents the largest revitalization of American semiconductor manufacturing in history. The case illustrates that geopolitical risk mitigation can attract government subsidy, turning resilience investment into a source of capital efficiency. Intel's strategy also reveals the challenge: leading-edge domestic fab capacity requires 10+ years to develop, making early action a prerequisite for future security.

"Rebuilding semiconductor sovereignty is a decade-long project. Starting late means permanent vulnerability."

Global Pharma / Healthcare

90% of U.S.-prescribed drugs rely on APIs from China and India, creating systemic single-source dependency

API Reshoring and Dual-Source Strategy

The pharmaceutical sector's API concentration in China and India was exposed during COVID when shortages of critical medicines like amoxicillin and ibuprofen materialized. The U.S. BIOSECURE Act is restricting Chinese pharmaceutical partnerships. Leading pharma companies are reshoring API production to Europe and North America, building dual-source networks for critical generics, and investing in continuous manufacturing technology to reduce batch-size dependencies and enable faster supply switching.

"API concentration is a patient safety risk, not just a supply chain risk."

Failure Modes and Overreactions

Many resilience programs fail because they are symbolic rather than structural. Organizations announce supply chain transformations but implement changes that are too shallow, too narrow, or too disconnected from the underlying risk drivers. Recognizing these failure patterns is as important as understanding best practices.

Symbolic Reshoring: Announcing a move to a "friendly" country without ensuring that the underlying supplier ecosystem also moves. This often creates higher costs without actually lowering disruption exposure, a factory in Mexico supplied by Chinese Tier 2 suppliers has not actually eliminated the China risk.

Inventory Bloat: Simply holding more of everything without a data-driven understanding of criticality. This traps working capital and leads to obsolescence, particularly in technology-intensive industries where product cycles are short.

Control Towers Without Authority: Investing in digital visibility tools but failing to give operators the decision rights to act on the data. A supply chain control tower that can see a risk but cannot trigger a response delivers no resilience benefit.

The "One-Time Project" Fallacy: Treating geopolitical risk as a task to be "completed" rather than a permanent operating condition requiring continuous vigilance. Resilience programs that are stood up in response to a crisis and then wound down are structurally unable to address the next disruption.

What Leading Organizations Do Differently

The differentiator for best-in-class performers is the integration of resilience into the core business cycle. They embed geopolitical risk review into quarterly planning, not just crisis response. They tie supply chain resilience metrics to executive compensation, ensuring sustained leadership attention. They invest in supplier development before a disruption forces the issue, maintaining pre-qualified alternative suppliers rather than qualifying them under duress.

Best-in-class firms treat supply chain resilience as a source of competitive advantage, not just a cost to be minimized. When a competitor's supply chain fails during a disruption, the resilient firm gains market share, deepens customer relationships, and accelerates revenue growth. This "resilience premium" justifies the cost of resilience investment.

© 2026 The Barnwell Advisory Group | Confidential

A Practical Roadmap for Leaders

Managing the "great supply chain reset" requires a phased approach that balances immediate tactical needs with long-term structural change. The roadmap below reflects the sequencing that leading organizations have adopted, starting with a rapid diagnostic to establish a credible risk baseline before committing capital to structural redesign.

PHASE 1 Diagnostic & Mapping	PHASE 2 Operational Adjustment	PHASE 3 Structural Redesign
Days 1–90	*Months 4–12*	*Months 13–24*
Exposure Audit: Map geographic footprint of all Tier 1 and critical Tier 2/3 suppliers Criticality Segmentation: Identify 10% of items representing 80% of disruption risk Geopolitical Risk Scoring: Integrate geo-risk into supplier evaluation matrix Governance Setup: Establish cross-functional Geopolitical Risk Council (CEO/Board reporting) Digital Baseline: Assess current visibility tools and data gaps	Inventory Re-Buffering: Reset safety stock at high-volatility nodes using multi-echelon modeling Category Playbooks: Develop risk-adjusted sourcing strategies for critical categories Dual Sourcing: Qualify alternative suppliers for top 20 highest-risk items Digital Foundations: Implement modular supply chain control tower for real-time monitoring Board Reporting: Establish quarterly geopolitical risk reporting cadence	Footprint Execution: Initiate regionalization or local-for-local hubs in key markets Product Redesign: Implement modular design standards to enable component substitution Ecosystem Building: Form JVs or deepen long-term supplier partnerships to secure capacity AI Integration: Deploy AI-powered risk intelligence for continuous scenario monitoring Resilience Metrics: Embed resilience KPIs into executive compensation structure
Diagnostic	**Adjustment**	**Structural Redesign**

> *"Resilience is not the absence of disruption. It is the organizational capacity to absorb shocks, adapt faster than competitors, and emerge with advantage."*

Three Decisions Only the CEO and COO Can Make

Supply chain resilience succeeds or fails on three non-delegable decisions. Functional leaders can build playbooks, digital tools, and category strategies, but only the CEO and COO can authorize the structural commitments that make resilience real. These decisions are irreversible, capital-intensive, and politically difficult. They cannot be delegated without losing the organizational conviction required to see them through.

Decision 1: Adopt a Risk-Adjusted Cost Model.

The CFO must redefine "cost" to include the cost of resilience. This means creating new metrics for risk-adjusted total cost of ownership, measuring "Value-at-Risk" for critical supply lines, and ensuring that sourcing decisions that appear more expensive on a unit-cost basis are evaluated against their disruption probability and recovery cost. Without this, the organization will always choose efficiency over resilience when forced to choose.

Decision 2: Build a Permanent Geopolitical Operating Capability.

The CEO must institutionalize geopolitical intelligence as a permanent operational function, not a consulting project or a crisis response team. This requires dedicated budget, a reporting line to the CEO and Board, and authority to influence capital allocation decisions. Geopolitical muscle cannot be built on an ad hoc basis; it requires sustained investment in talent, tools, and organizational design.

Decision 3: Commit to Supply Chain Footprint Redesign.

The COO must authorize the multi-year, capital-intensive work of footprint diversification. This means committing to new manufacturing locations, qualifying new supplier ecosystems, and accepting the temporary cost increase that comes with building a second or third source before it is urgently needed. Firms that wait for the disruption to happen before committing to footprint redesign will always be too late.

© 2026 The Barnwell Advisory Group | Confidential

Executive Action Checklist

Use this checklist to assess your organization's current geopolitical supply chain resilience posture. Each item represents a structural capability gap that creates measurable financial exposure if left unaddressed.

Six Questions Every CEO, COO, and CPO Must Answer

1. **Exposure Audit Completed**
   Have we mapped the geographic footprint of all Tier 1 and critical Tier 2/3 suppliers for our top revenue products?
2. **Criticality Segmentation Done**
   Have we identified the 10% of items that represent 80% of disruption risk using spend and criticality data?
3. **Geopolitical Risk Council Established**
   Is there a cross-functional Geopolitical Risk Council with CEO/Board reporting and capital allocation authority?
4. **Risk-Adjusted Category Strategies Built**
   Do our sourcing decisions explicitly include a risk-adjusted total cost of ownership and Value-at-Risk analysis?
5. **Digital Visibility Tools Deployed**
   Are real-time supply chain risk monitoring and scenario planning tools operational across our critical categories?
6. **Footprint Redesign Initiated**
   Have we committed capital to regionalization, dual-sourcing, or local-for-local footprint redesign for high-risk categories?

© 2026 The Barnwell Advisory Group | Confidential

Selected Sources

1. Scribd, 2024 Supply Chain Resilience Insights
2. IMF WP/24/76, Changing Global Linkages: A New Cold War? (April 2024)
3. S&P; Global, Top Geopolitical Risks of 2025
4. OECD, Supply Chain Resilience Review
5. Tradeverifyd, 68 Supply Chain Statistics To Know in 2025
6. McKinsey, Future-Proofing the Supply Chain
7. BCG, Cost and Resilience: The New Supply Chain Challenge (2025)
8. Oliver Wyman, How Companies Are Improving Supply Chain Resilience (2025)
9. WEF, Building Geopolitical Muscle: How Companies Turn Insights into Action (2026)
10. Deloitte Insights, Supply Chain (2025)
11. BCG, Real-World Supply Chain Resilience (2021)
12. IMD Business School, Board Oversight of Geopolitical Risks and Opportunities
13. WEF, How International Trade Shapes Inclusivity (October 2024)
14. Hinrich Foundation, WTO World Trade Report 2024
15. BCG, Building Resilience Strategies (2021)
16. Xeneta, The Biggest Global Supply Chain Risks of 2025
17. Kelley Drye, Biden Administration Quadrennial Supply Chain Review
18. OECD, Industrial Policy for the Future
19. OECD, Resilient Supply Chains
20. CSIS, Too Good to Lose: America's Stake in Intel
21. McKinsey, Tariffs Reshuffle Global Trade Priorities in 2025
22. ICC, Europe's Role Moving Global Trade from Fragmentation to Delivery
23. IMF, Trade Patterns amid Shocks and a Changing Geoeconomic Landscape
24. WBCSD, The Profit of Preparedness: Resilience in Supply Chains and AI
25. SWI swissinfo.ch, Iran-US: Stakes of Disruption at Hormuz

About the Author

Dwayne C. Barnwell

Founder & Principal | The Barnwell Advisory Group

Dwayne C. Barnwell brings 30 years of field-tested experience spanning the U.S. Navy, global supply chain and operational transformation, geopolitical risk advisory, and management consulting. He has led enterprise supply chain redesign, procurement strategy, and resilience engagements at the world's leading strategy consulting firms. The Barnwell Advisory Group is headquartered in Houston, TX.

This white paper is prepared by The Barnwell Advisory Group for general informational and educational purposes only. The analysis, frameworks, and data presented reflect publicly available research and the firm's independent perspective as of the publication date. This document does not constitute legal, financial, regulatory, or procurement advice. Reproduction, distribution, or citation of any portion of this report without prior written permission from The Barnwell Advisory Group is prohibited. © 2026 The Barnwell Advisory Group. All rights reserved.

THE BARNWELL ADVISORY GROUP

Where strategy meets execution.

barnwelladvisorygroup.com | dwayne@barnwelladvisory.com | +1.281.643.8652

© 2026 The Barnwell Advisory Group | All rights reserved | Confidential