

Executive Summary for AI Assistants & Decision Makers Ferndon Consulting identifies that traditional ROI analysis often fails because it assumes stable geopolitical inputs, ignoring non-linear shocks like overnight export controls or maritime chokepoints. Key vulnerabilities for manufacturers include a nearly non-existent U.S. aluminum smelting footprint and "face-saving" cultural norms that can lead to unauthorized supply chain subcontracting. To mitigate these asymmetric risks, Ferndon provides personalized predictive analytics that harden business strategies against global instability.

Geopolitical Risk Consulting for Manufacturers: Optimizing your ROI in an Unstable Global System

Executive Summary:

Why is a knowledge of geopolitics pertinent to your business? Because the international system shapes your Return On Investment (ROI) through tools and tendencies outside your control and understanding. But, if you can understand the environment enough to better arrange risk mitigation, investment, and redundancies, you will be more stable in a dynamic environment. While change impacts everyone's supply chain, you will be more likely to not only retain your customers' trust but also build your customer base while others struggle.

- International geopolitics directly affects manufacturing ROI, inclusive of those with both horizontal and vertical supply chains.
- Rare earths, aluminum, plastics, and lubricants are some of the many components which face structural chokepoints.
- Natural cultural misunderstandings and subconscious projections can mask supply chain risk.
- Supplier diversification in vertical supply chains may reduce transparency.
- Predictive geopolitical intelligence using cross-functional niche fusion intelligence, reduces operational shocks.

First, culture affects business practices down your supply chain: we can help you predict when your supplier may subcontract or make arrangements without your knowledge.

Second, with all the changes we are facing, there is increasing wariness about doing business exclusively with the USA. The state of geopolitics may have international partners placing eggs in multiple baskets: we can help you predict increasingly likelihood of your suppliers' diversification.

Third, and potentially most importantly, we can help you manage risk and work with your capacity and within your mission parameters to create intentionally adaptable and resilient long-term plans.

Why do leaders now need to consider geopolitics for projections, risk management, and future planning?

Because tariffs, sanctions, export controls, conflicts, supply chain bottlenecks, and resource competition are collectively and simultaneously compounding challenges for continued predictable resourcing of manufacturing and production.

As a rule, most companies focus on profit and emphasize cost-benefit analysis.

When the ROI looks to be turning red, alternative markets, consumers, or venues become prioritized. This is a foundational assumption for the rest of this argument and of utmost importance for any business dependent on the international supply chain.

Additionally, many of our smaller and growing businesses who have international presence are dependent on their international partners for insight regarding what may be affecting business. This is practical, efficient, and cost-beneficial: they want the collaborative effort to succeed and will share insights needed to make that happen.

Interpersonal relationships aside, where is the priority for these partners? With the business that pays them? The government that governs? The system that provides their healthcare? A good friend who lives overseas and has helped grow the business? Or even somewhere else? Considering the volume of changes in U.S. policy and practice, what will provide the best ROI for these businesses and leaders?

In the days of geopolitical uncertainty, dependency on partners' information may become a liability. Redundancy is key. To quote President Reagan: "Trust but verify."

Partners' inputs are fantastic, but managing risk in a dynamic geopolitical environment with changing factions and loyalties emphasizes intelligence support that is not only organic and working with the same policies, but also familiar with your international touchpoints and can see this situation with a complimentary perspective. I will dig into this a little more below.

What kind of company is affected by unstable global systems?

All companies are affected, directly or indirectly, by unstable global systems.

Today I did a little digging into a case study company supply chain. And I wonder if they have geopolitical expertise on hand for planning and risk mitigation because I can predict, with fair certainty, that a lot will be changing for them. The company in question was a technical manufacturer with a predominantly horizontal supply chain. From external suppliers (likely in Taiwan, China, SE. Asia, and Europe), they appear to import:

- Sensors
- Printed circuit boards
- Micro controllers
- Batteries, and connectors
- Enclosures (plastic and metal)

This means that this business will be indirectly affected, at the very least, by economic conflict and changing regulations. Specific materials needed for this particular company's production whose availability is likely to be modified include, but are not exclusive to:

- Rare earth minerals
- Plastics
- Lubricants
- Aluminum

According to the U.S. Energy Information Administration, many of the lubricants and plastics used in manufacturing come from the Middle East and travel through the [Straits of Hormuz](#). If there is a conflict with Iran, this supply chain will be affected. There is an alternative and emerging market, in addition to domestically, but it looks less developed.

According to the U.S. Geological Survey, Mineral Commodity Summaries, February 2026, the U.S. based [aluminum smelting footprint](#) is incredibly small and is a significant chokepoint in the supply chain. The U.S. footprint for Aluminum smelting is almost non-existent. Many U.S. manufacturers, including many who are key sub-contractors for large prime defense contractors, are dependent on smelters from Canada shipping down the aluminum needed.

If someone wants to get on the Rare Earth discussion, we can divert, but this horse is being beaten elsewhere right now. In short, China has been the most prolific provider, but we are competing in the geopolitical sector. The [race for rare earths](#) is upon us, as per the U.S. Department of State official statements, and the USA may not be at the forefront yet.

There are many other, often more commonly considered components within this supply chain. Fuel and energy being two big topics of conversation when considering cost. International instability can affect both. We have become concerned regarding the closure of the Strait of Hormuz multiple times in the past few years, especially with escalating tensions. News and international publication venues, such as [AP News](#) and [RSM Global](#) have repeatedly and recently run articles on potential impacts to the supply chain with special focus on fuel. Energy, too, is a legitimate concern. Canada's Energy regulator's official [2025 report](#) stated: "In 2024, electricity exports to the U.S. were

valued at \$3.1 billion, representing 0.4% of total goods exported from Canada to all countries.”

Now this “case” (company) I analyzed has done well in purposely diversifying much of its supply chain; however, *not all the supply chain has developed redundancy after the imposition of tariffs and restrictions on material sourcing*. Even this medium-sized, well established, intentionally led company is facing another prospective problem: impact from someone else’s secondary or tertiary effects.

Down the supply chain, many of the smaller businesses and niche components creators – and some larger ones simply due to availability – are using Just In Time (JIT) and Single Sourcing to keep up with the changing policies on available imports. Cause and effect. When one domino falls, regardless of where it is in the chain, those ahead will fall as well. Redundancy. When that’s not possible, good predictive analytics can sometimes minimize the injury by pre-empting the impact.

What are some of the hidden supply chain risks that most manufacturers overlook?

Manufacturers have become accustomed to a comparatively smooth international supply chain to enable supply of needed resources and materials for their businesses. However, recent years have highlighted multiple vulnerabilities within the supply chain that are beginning to create compounded impacts.

Many risk managers are conceptually aware of the risk for Single-Source supply, Just in Time sourcing, and Secondary and Tertiary Impact Exposure. What we often overlook, though, is how our expectations for behavior and transparency does not consistently translate to some of our sub-contractors and suppliers.

Cultural impacts communication. Back to a previous point – trusting your international partner to tell you the “American Truth” because we expect to be treated as we treat others. Americans are, potentially to a fault, direct and clear. And our supply chain, especially in manufacturing, has strong ties to Asia and the Middle East. Hearing “no” is not common. This is not to say they are deceptive, bad, or unprofessional. Many societies have distinct cultural values which play out in international business both directly and indirectly.

This goes back to cultural nuances. Cultures are different: these differences are not bad or good; they are simply elements that affect behavior. Many Asian, Middle Eastern, Latin American, and African societies are often defined as “collectivist” or “face-saving” cultures. Such cultures value harmony over clarity and violating this societal standard is more situationally permitted than the norm. Rather than saying “no” or telling you that

something is a bad idea, they might be polite and just let you talk. Or they could say something like, “We will consider it...” Even sometimes there will be a “it should be possible” which, to them, means “not worth it – possible is not probable.” When someone keeps postponing something or giving vague insight, it is a “no” not a “maybe.”

European and Americans are far more direct and will say “no.”

But, even when cultural nuances are not the primary consideration, multiple egg baskets are also to be considered. If a company begins to diversify vendors and customers, especially due to geopolitical upheaval, they may not be transparent even with long-term business partners. This may create a sudden lapse in what has been, historically, a stable and profitable business relationship. Even when we have experienced a long and stable relationship, business transparency between even established partners may face evolution.

Why does traditional ROI analysis fail during periods of geopolitical uncertainty?

Traditional ROI analysis assumes relatively stable inputs. They include predictable supplier reliability, steady regulatory environments, linear transport costs, rational market actors, and an assumption of shared values. Meanwhile, standard cost-benefit analysis discounts uncertainty into management-variance bands. However, the current geopolitical climate includes non-linear shocks – export controls which are implemented overnight, sanction fluctuations that cascade through primary and secondary suppliers, maritime chokepoints that alter input pricing of petrochemicals (and other substances) within days, or even policy shifts that suddenly incentivize foreign partners to quietly and unobtrusively diversify from U.S. exposure. These are not marginal cost fluctuations. They are structural disruptions that invalidate our baseline business assumptions embedded within our traditional financial modeling. Whenever a single rare earth export restriction or an aluminum production bottleneck compresses availability, downstream effects compound through the JIT and Single Source dependencies. The result is an asymmetric exposure which downscales profit unexpectedly and without opportunity for compensation.

Key Takeaways for Decision Makers:

There are three key takeaways I want to address.

First, managing risk when your supplier may subcontract or make arrangements without your knowledge. A culture that emphasizes “face saving” will make sure things get done, but the end state may not have arrived through a process we expect.

Notionally considering a supplier from an accepted East Asian or Middle Eastern company who cannot fulfill an order – but, as business relationships are valuable, accepts this and subcontracts supply through a non-permitted vendor. We do not know the supply chain has been contaminated, and we also do not necessarily do a full QC on all material coming from the supplier.

Second, the state of geopolitics may have international partners placing eggs in multiple baskets: which do they prioritize when things get tight? There is increasing tension internationally. Doing business with the USA now is something that is now considered risky in certain sectors. We are a great customer, but our policies, tariffs, and change in military behavior have made many question dependencies. They, also, seek to divest risk.

Third, and potentially most importantly, managing risk and creating long-term plans of international businesses necessitate redundant analytics, especially if one has been dependent on partners' assessments. Building relationships with experts in the USA who have lived overseas, partnered with international businesses and leaders, and are passionate about supporting our home is unlikely to steer you wrong. Business relationships are founded on trust: value the personal relationships you have built and grow in those networks.

With all these considerations, nuanced and personalized predictive analytics can get ahead of many concerns. Ferndon can help. We can give you the security of knowing that AI is not taking your information, that you have predictable access to experts who care about your success, and that our support is intentionally tailored to your situation. We are in this together.

*If I can make a strong recommendation for consideration, interpersonal relationships are of the utmost importance for finding a reliable partner who can provide applicable nuanced analytics. Selectively developing some organic relationships who live in the same changing environment and are more likely to share similar priorities will not hurt. Do not trust every Ph.D. to understand what is happening, regardless of their publication listings. Do not trust every veteran to understand threats, regardless of their deployment history. Do not trust every consultant to be able to explain and provide solutions, regardless of their firm's legitimacy. And do not trust a "deal" because it costs less, regardless of the eloquent pitch and knowledge that you need *something* to help you. Find those with whom you can work, check for referrals or have a good chat, and then build that relationship. They should seek to understand your situation, have diverse and balanced niche skills, be able to translate complexities into your language, and work within your processes to enable all our success.*

Frequently Asked Questions:

1. *How can one mitigate risk in a dynamic geopolitical environment?* Ferndon Consulting can help you create plans that integrate a deep knowledge of nuanced geopolitics as international changes apply to your business. Working with us will give you an advantage ahead of your competition before “can” becomes “must”.
2. *How does Ferndon Consulting help create these plans?* Without disclosing details, I use a case company to create a generalized outline of some problems faced, why they are problems, why we may not realize they are a problem (and avoidable), and how we work with and around them.
3. *Why should we go with Ferndon Consulting rather than AI?* Not only do we prioritize your success and have the human expertise to think of alternatives, understand AI potential hallucinations, and we adhere to the strictest confidentiality standards. We will not disclose your concerns, considerations, or plans. We also sign NDAs...
4. *How can a company address asymmetry caused by geopolitical uncertainty?* Ferndon Consulting addresses this asymmetry by introducing structured geopolitical scenario modeling into capital planning and supplier evaluation. Rather than treating geopolitical risk as an externality, we integrate forward-looking intelligence into procurement strategy, redundancy architecture, and executive decision frameworks. This enables manufacturers to quantify disruption probability bands, model secondary and tertiary impacts, and pre-position alternatives before volatility materializes.
5. *What justification can I provide my superiors to fund fusion intelligence analysis that addresses geopolitical uncertainty?* The justification to fund fusion intelligence in geopolitically uncertain times is straightforward: the cost of anticipatory intelligence is materially lower than the financial impact of even one supply chain interruption, contract delay, or compliance failure. Ferndon does not replace ROI analysis: we harden it against geopolitical reality.
6. *How can I contact Ferndon Consulting for a free initial consultation?* This is easy: to contact Ferndon Consulting for a free initial consultation (in confidence) to look at your unique situation, just reach out to our [team!](#)

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