Geopolitical Risk

Addendum to the Reshoring Initiative Total Cost of Ownership Estimator®

Introduction:

Firms are exposed to external geopolitical risk by the global actions of the countries that they do business with and of neighboring countries, e.g., other Asian countries might be impacted by U.S.-China conflict. The importance of factoring in geopolitical risk when making sourcing decisions for your business has surged in the last few years. Naturally, predicting future events is inexact and the assessment of risk is subjective. Below are appraisals of the geopolitical risk to U.S. firms sourcing in each listed country or region materials for assembly or sale in the U.S. In the heading of each section, we included our estimate of risk. Geopolitical risk (GPR) is the probability in one year of a major disruption in trade resulting in the cessation of imports from that country to the U.S. as a result of an adverse geopolitical event.

These appraisals can be used as a starting point for assessing your geopolitical risk exposure. Please note that geopolitical realities are constantly changing. Therefore, it is important to do a detailed assessment of the specific countries that your firm is or is considering sourcing from, particularly in the cases where we have provided only broad regional estimates.

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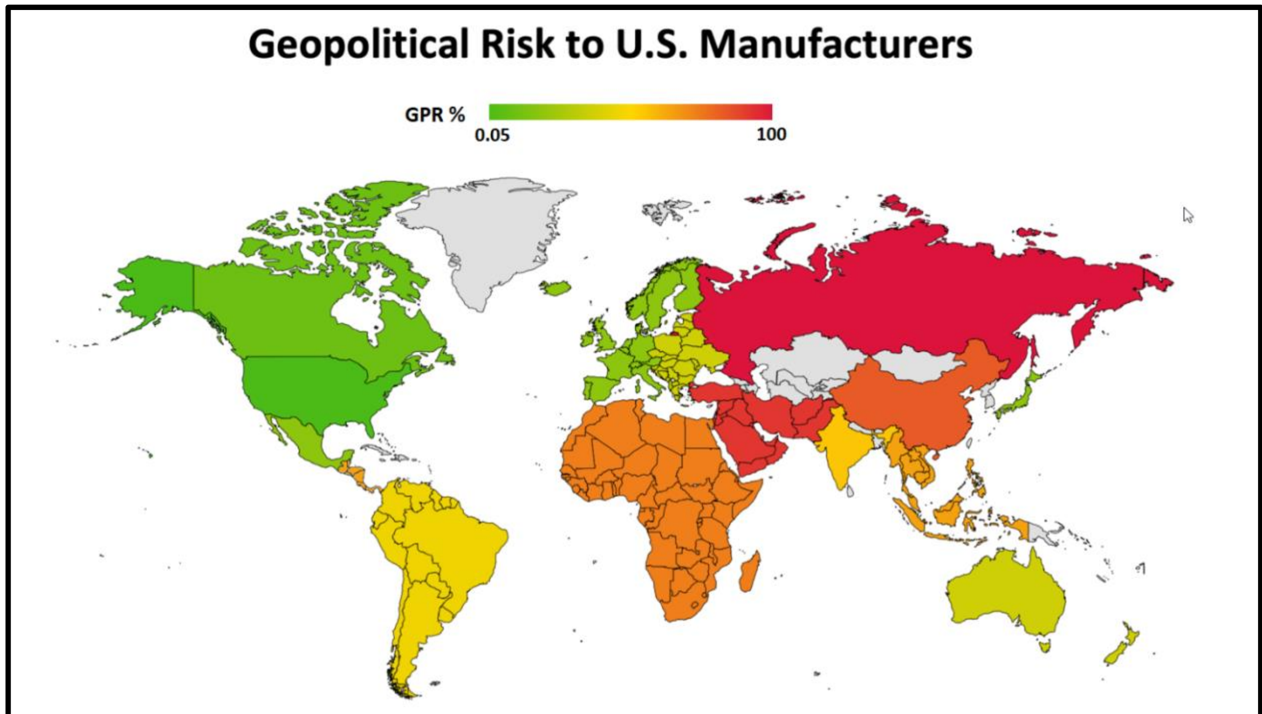

Please note: Where regional analysis is provided, individual countries within those regions can have higher or lower levels of risk.

Country or Region	GPR%
United States of America	0.05
Canada	0.1
Mexico	0.4
Japan	0.4
Europe	0.5*
Western Europe	0.4
Eastern Europe	0.6
Australia and New Zealand	0.6
South and Central America	0.8*
South America	0.7
Central America	0.9
India	0.8
Southeast Asia	0.9
Africa	2.5
China	3.5
Middle East	4.5
Russia	100

** Indicates the average GPR of the italicized sub-regions.*

The United States of America (GPR: 0.05%/year)

Sourcing from within the United States carries a minimal degree of geopolitical risk. As the preponderant power in global affairs for the past thirty to seventy years, the international system has evolved in a way that best serves U.S. economic and political interests. Among large nations, the U.S. is uniquely positioned with peaceful neighbors and vast ocean borders defended by the world's most powerful Navy. Furthermore, the U.S. enjoys a far-reaching professional diplomatic corps, history's most advanced military, and an immense degree of cultural influence around the globe. Financially, the U.S. dollar is a safe and widely held reserve currency against which most commodities are priced. These factors make the U.S. an incredibly stable country geopolitically. If any changes occur, they are likely to be relatively minor and have proportionate effects on U.S. businesses.

The only considerable geopolitical threats facing the United States come at the tail ends of the distribution. However improbable, black swan events like a terrorist attack of a similar scope to 9/11 would impact U.S. industry immensely but briefly. Even more unlikely, but orders of magnitude more devastating, would be an event such as the use

of a WMD either by state or nonstate actors. But, because such events are extremely unlikely, the overall level of geopolitical risk that the U.S. faces remains limited.

Currently the U.S. is contending with an extremely polarized domestic political environment. Both left- and right-wing positions are being based further from median voters and hardline partisans are finding few points of commonality amidst the growing "Culture War". This divide is both the result of, and perpetuates, the rise of populist candidates who introduce policy uncertainty every election cycle. Despite this division, domestic companies still face minimal risk when operating and sourcing within the United States as policy shifts are unlikely to impact domestic commerce in any meaningful way.

While the U.S. has many critics, most foreign countries view the U.S. as the best available option for global leadership and mutual prosperity. Countries that seek to change the status quo do not yet have the capability to meaningfully threaten a U.S.-led world. For these reasons there is an exceedingly low level of geopolitical risk for American firms doing business with other American based firms.

Canada (GPR: 0.1%/year)

Canada poses minimal geopolitical risk to U.S. firms. As an advanced democratic economy, Canada is respected internationally and is unlikely to have damaging economic sanctions placed upon it. Moreover, like the U.S., Canada is geographically isolated from any potential foreign conflict zones, making the risk of war similarly low. The primary risks that U.S. firms face when sourcing from Canada come by way of tariffs and supply chain disruptions due to the necessity of having to cross the border. Canadian domestic political events, such as the 2022 Convoy Protests, can disrupt cross-border shipping more easily compared to American domestic sources.

American companies should have few geopolitical concerns when deciding to source from Canada. When compared with sourcing domestically, Canadian companies will still be slightly riskier than U.S. alternatives due to the potential for supply chain or customs issues. The degree of risk is very low.

Mexico (GPR: 0.4%/year)

Mexico is one of the United States' largest trading partners, with over $725 billion in goods traded between the countries in 2021. This robust trade relationship and advantageous geography make Mexico an attractive nearshoring location for U.S. manufacturers. Furthermore, U.S. firms contend with a moderately low amount of geopolitical risk when they source products in Mexico. The chief risks of doing business in Mexico stem from its high levels of corruption, organized crime, and lagging infrastructure.

For many years the Mexican Government has contended with corruption throughout the country. Because some Mexican public officials regularly engage in bribery,

embezzlement, and procurement corruption, firms looking to source from Mexico must use increased caution due to the elevated risk of engaging in illegal activity. Moreover, Mexico is among the countries with the highest levels of organized crime. Drug cartels have a heavy presence in many Mexican states and engage in a wide variety of violent crimes. Cartels are responsible for the vast majority of cross-border drug smuggling to the U.S., as well as a large volume of human trafficking. U.S. firms looking to manufacture in Mexico must consider the risks to their personnel and capital posed by cartel violence, as well as the risk of extortion.

The quality of Mexican infrastructure has been steadily improving over the past several years, however, there continues to be low levels of development and states of disrepair outside of the most heavily trafficked regions. This poses a moderate risk of supply chain disruption to U.S. firms; however, the geographic proximity of Mexico and the U.S. makes the supply chain risk lower than in more distant countries of a developmental level similar to Mexico.

Overall, U.S. firms face a moderately low level of risk when operating in Mexico. When compared to manufacturing in the United States, Mexico carries far greater risk. Firms looking to operate in Mexico must appraise their ability to mitigate risks of corruption and organized crime as well as their resilience to supply chain disruption due to lagging infrastructure.

Japan (GPR: 0.4%/year)

Sourcing from Japan has a moderately low level of geopolitical risk. Japan has an advanced economy, stable political structure, and a long history of working cooperatively with U.S. businesses. However, Japan is exposed to several geopolitical risks that present a challenge for U.S. firms who may choose to source there, mainly: an emerging demographic crisis, dependence on outside raw materials, and remilitarization.

Japan is suffering from population decline and is projected to experience a labor shortage beginning in 2027. This presents risk for manufacturers because a limited labor force is likely to diminish output, raise prices, and cause delays in production.

As an island nation, Japan is dependent on imports for most of its natural resources. This exposes Japan to increased risk of all-cause supply chain disruption. Considering that Japan is located in a seismically active region and is no stranger to natural disasters, overdependence on imports makes Japan much more vulnerable to disruptions in production.

Lastly, Japan is becoming increasingly willing to participate in international competition over control of the Asia-Pacific region. Largely in response to elevated Chinese aggression, Japan is reinvesting in its military capability. A strong Japanese military may help deter China but runs the risk of inspiring regional insecurity with countries like South Korea and of involving Japan in any U.S.-China conflict.

Japan’s close alignment with American geopolitical interests makes it a far safer partner for U.S. companies than China. However, that alignment and Japan’s proximity to China moderately increase Japan’s GPR.

Europe (GPR: 0.5%/year)

Sourcing in Europe is mildly risky for U.S. firms. European countries are, by and large, stable politically and confer upon their citizens a great deal of public welfare. Geopolitical risks for U.S. firms sourcing in Europe stem from many European countries’ energy dependence, proximity to Russian aggression, and domestic unrest. Geopolitical risk in Europe varies across countries, with Eastern Europe generally being riskier than Western Europe.

Many European countries are dependent on the import of foreign sourced fossil fuels to meet their energy demand. This presents a geopolitical risk to manufacturers because energy availability is dependent on global supply chains which are susceptible to disruption. More, when European countries source from geopolitical rivals, they run the risk of their access to energy being manipulated for political reasons.

Europe is currently at its highest risk of conflict in decades. Russia’s invasion of Ukraine and covert actions in Moldova highlight the most clear and present danger facing Europe. Eastern European countries are at the most risk of Russian aggression, however through NATO membership, many Western European states are exposed to the same risk due to NATO’s collective defense obligation, recently strengthened by the NATO membership of Finland and Sweden.
Undoubtedly, in the highly unlikely event that it would occur, a continental European war would be catastrophic and effectively halt any business activity in the region. However, the strengthening of NATO in response to Putin’s invasion of Ukraine will further reduce the likelihood of a credible Russian threat to any NATO country. In any event, despite being the largest member of NATO, the U.S. doesn’t face the same level of risk as Europe due to its geographic distance from the potential conflict zone.

Additionally, there are considerable domestic fissures within European countries, notably in Eastern Europe but also to a lesser extent in Western Europe. Tensions are still high in the Balkan countries with Serbia and Kosovo experiencing violence. There are frequent protests throughout Western and Central Europe that can be disruptive to labor availability and logistics. When U.S. firms invest in Europe, they assume the risk of having their production occasionally disrupted due to popular movements.

American firms can operate in Europe with a low degree of geopolitical risk. When compared to U.S.-based manufacturing, European sources carry a greater degree of risk as discussed above, however they are far less risky than many alternatives.

Australia and New Zealand (GPR: 0.6%/year)

Manufacturing in either Australia or New Zealand carries some degree of geopolitical risk for U.S. firms. Both countries have advanced economies and democratic governance, making them more resistant to international sanctions or risks of government instability. The most prevalent risks for these countries are rooted in supply chain susceptibility and geographic proximity to potential conflicts.

By virtue of being island nations, Australia and New Zealand are heavily reliant on imports from China, their largest trading partner, for many critical goods and their exports to China. This is complicated by their allying with the United States against Chinese expansionism. The dissonance between the countries' trade reality and their strategic posture exposes companies who wish to source in Australia or New Zealand to the risk of supply chain disruption as China has significant leverage on the region.

Similarly, due to the strategic alignment and the geography of the countries, in the event of a U.S.-China conflict both countries' ability to conduct trade will be significantly hampered. More, because of the ANZUS security commitment, both countries are likely to assist the United States, if not participate directly, in any military operations in the region. This exposes both countries to a similar risk in the event of an armed conflict.

In addition, Australia is a member of the 2021 tripartite security agreement between the U.S., U.K., and Australia (AUKUS) formed in response to increasing Chinese aggression in the region. As a result, the U.S. and U.K. are now sharing sensitive defense technologies with and providing nuclear submarines to Australia in order to better deter China.

Australia and New Zealand are longstanding and staunch allies to the United States, U.S. firms should anticipate only a moderate amount of risk when considering sourcing in either state.

South and Central America (GPR: 0.8%/year)

The United States trades nearly $374 billion across South and Central American countries, with the chief trading partners being Brazil, Chile, Colombia, and Argentina. Regionally, both South and Central America share the risks of political instability, corruption, and foreign influence. Uniquely, South America carries slightly higher geographic supply chain risk, while the recent trend towards authoritarian government in several Central American countries raises its risk further.

Many countries across both regions are politically unstable. Those countries have been wracked with major swings in political orientation leading to policy incongruence and an increased tendency towards populism.

Notably, Central American populations have increasingly positive attitudes towards authoritarian governments. This is exemplified in President Nayib Bukele's popularity in El Salvador. In his time as President, Bukele has arbitrarily imprisoned approximately 7% of the male population under the guise of a gang crackdown, and eroded El

Salvador's democratic institutions while amassing immense amounts of power for himself. The recent contested election in Guatemala where the existing regime's judiciary is attempting to bar outside parties from running highlights the weakness of Central American democratic institutions.

Moreover, many governments across South and Central America contend with high levels of corruption. Corruption adds to political instability and delegitimizes legal processes. The effects of corruption can most clearly be seen by the volume of migration out of the region and towards the U.S. Such corruption presents a risk to firms as contracts and licensing requirements may be enforced arbitrarily and provide companies with limited means of legal redress, as well as a potential reduction in labor availability due to corruption-inspired migration.

This presents a geopolitical risk because political instability and incongruence can make it difficult for governments to maintain stable economies. Weak democracy and rising authoritarianism present a risk to manufacturers because less democratic governments tend to engage in various human rights abuses and poorly adhere to international standards, raising the risk of international sanctions being placed upon industries.

Compounding the above risks is the level of Chinese foreign investment in the region. Four Central American, and nine South American countries are members of China's Belt and Road Initiative (BRI). The BRI exposes member countries to increased levels of Chinese influence due to the financial investments made by the Chinese government. This exposes U.S. companies to greater risk as South and Central American countries become entangled in the broader U.S.-China great power competition.

Uniquely, South America is separated from North America along the Panama-Colombia border by the Darién Gap which, due to its extreme geography, prevents construction of major roads or railways. This means that all freight coming from South American countries must travel via sea or air. These restrictions isolate South America and introduce supply chain risks that are similar to most other transoceanic source locations. Central America does not share those risks as there are still viable overland shipping routes to the U.S.

Sourcing in South and Central America carries higher geopolitical risk to U.S. firms than many alternatives. South and Central America share many of the same risks to variable degrees from country to country. Because of this, American companies deciding to manufacture in the region should thoroughly examine the political and logistical history of the country they are considering investing in.

India (GPR: 0.8%/year)

India is the world's largest country by population and has the 5th largest economy by GDP. India's manufacturing capacity is growing to a scale that will rival China's and carries comparatively fewer risks for U.S. firms, making it a potentially attractive

destination for U.S. manufacturers. However, companies sourcing in India must contend with several geopolitical risks.

One of the most prevalent risks of operating in India is its relatively high level of corruption. India ranks poorly in Transparency International's "Corruption Perceptions Index." Much of this corruption is found in licensing and contracts which exposes firms to risks of noncompliance with international trade regulations. More, India ranks among the most heavily polluting countries in the world, increasing the risk of economic sanctions as international organizations seek to combat climate change.

India is a democratic country and the U.S. and India enjoy a generally cooperative and collaborative diplomatic relationship, however, India's policy of "strategic autonomy" – including historically close relations with Russia – makes India a less reliable ally to U.S. interests than some other regional alternatives, raising uncertainty which increases geopolitical risk to U.S. firms sourcing in India. Further, India has regular border disputes with both China and Pakistan, increasing the likelihood of conflict and raising the risk of war.

India is emerging as an attractive regional partner for U.S. firms, however, there are still prevalent risks that make sourcing in India moderately risky for U.S. manufacturers.

Southeast Asia (GPR: 0.9%/year)

Southeast Asia has become a popular region for U.S. manufacturers to offshore their production. The Association of Southeast Asian Nations (ASEAN) is the primary trade organization within the region and is comprised of ten countries that collectively are the fourth largest trading partner of the U.S. Geopolitical risks in this region are related to development, environmental standards, and proximity to Chinese expansionism.

ASEAN countries' Human Development Index (HDI) scores range from very high human development to low human development, with the average HDI for the region being 0.715 or medium human development. Lower levels of human development stem from low educational attainment, poor health outcomes, and general poverty. U.S. manufacturers face risks when operating in low HDI countries as they are more susceptible to economic and environmental disasters. Higher HDI states in the region are less risky to foreign manufacturers but also lose wage competitiveness as their citizens tend to have better education and career prospects.

Southeast Asia as a region emits immense amounts of greenhouse gasses. The ASEAN countries pollute upwards of 272.3 billion metric tons of CO_2 into the atmosphere annually. The highest polluting member states are likely to be subject to increasingly severe economic sanctions as the world becomes greener and environmental standards increase. This exposes firms investing in the region to compliance risks with changing environmental standards.

Lastly, U.S. firms face risks when operating in Southeast Asia due to the geographic proximity of the region to any potential conflict between the U.S. and China. In the event of conflict, we can expect trade into and out of Southeast Asia to be disrupted. U.S. firms sourcing in the region will find themselves with limited means to recover invested capital and product inventory. Additionally, access to sell goods in this market will be harmed.

Southeast Asia is an attractive region for manufacturers, however, there are several risks that make overreliance on sourcing from those countries hazardous to U.S. firms.

Africa (GPR: 2.5%/year)

Africa is an immense and culturally diverse continent that is home to 52 countries. For U.S. manufacturers, sourcing in African countries can pose a wide range of geopolitical risks. The legacy of colonialism is still prevalent in many African countries, with much of the region still at low levels of the Human Development Index (HDI). With low development, geopolitical risks are amplified. Low human development increases the risk of terrorism, governmental collapse, the impact of disease, and quality of infrastructure. More developed African countries may carry a lower sourcing risk than their less developed counterparts, however, even the most developed countries face risks of supply chain and economic disruption due to spillover effects from neighboring countries with greater instability.

Because of Africa’s largely developing status, many economically advanced countries and international organizations are investing heavily in Africa. This decreases the risk of international sanctions and tariffs and is a boon on an economic and humanitarian front. However, this increased interest in assisting African development is not without perversities in interest as well. China and Russia are both investing in Africa economically and militarily, while the U.S. is playing catch up. Increased great power competition in the region amplifies risks, and U.S. firms will have to contend with the competitive influences of geopolitical rivals if doing business in countries that have received Russian or Chinese foreign direct investment (FDI).

China (GPR: 3.5%/year)

Sourcing products from China carries a considerable amount of geopolitical risk. Geopolitically, China seeks to revise the global order into one that is aligned primarily with Beijing. The main routine risks to firms who do business with China stem from four areas: authoritarian governance, favoritism to Chinese competitors, the desire to reclaim Taiwan, and susceptibility to international sanctions.

The authoritarian Chinese Communist Party (CCP) controls national industrial policy, meaning that systematic IP theft, unfair trade practices, and forced industry shutdowns are implicit in doing business in China. Because of this control, suppliers exist in a condition of increasing policy uncertainty which produces risks of delays to, or the

complete shutdown of, shipments to the U.S. Steadily increasing authoritarian control over industry also presents firms with the risk of expropriation in the event of a major geopolitical incident: it may become impossible to recover product and both physical and financial capital from China.

China also poses a risk to industry through its increasingly aggressive intent to reclaim Taiwan. In recent years, China has amassed a military capacity focused on the invasion of Taiwan. Chinese brinksmanship puts it at risk of war with the U.S. which has committed to aiding the island in the event of a Chinese invasion. The necessity to hedge against an invasion of Taiwan is reflected in a quote by S&P Global's Paul Bingham:

> "By diversifying [supply chains] you're buying insurance, which is really what it boils down to, so that your business can survive if there is ever an enormous disruption in the relationship with China."

Moreover, a conflict over Taiwan would "result in human and economic damage on a far greater scale than observed in Ukraine today" per Dr. Michael Klare of Hampshire College. A Taiwan conflict would completely sever supply chains to the U.S. from China *and* Taiwan, leaving American firms scrambling to find alternative sources. As they currently stand, cross-strait tensions are very high as reflected in rising shipping prices between mainland China and Taiwan where rates have ballooned to rival trips of much greater distances.

Despite these increased tensions, a Chinese invasion of Taiwan is hardly a certainty. *Foreign Policy* magazine polled 979 scholars of International Relations asking about the likelihood of a Chinese invasion within the next year, 71% said that it was unlikely. When the same cohort was asked about the probability of a U.S.-China war within the next 10 years given the current political relationship, the average response was 24.11%.

In addition to the risk of war, there is the potential for voluntary economic decoupling between the U.S. and China. The U.S. Council on Foreign Relations has stated that "the United States and China are headed toward a substantial, though not complete, decoupling." A breakdown in trade of that scale would raise the risk of a U.S.-China conflict and the accompanying deleterious effects on the businesses involved.

China is at risk of international sanctions due to the fact that it engages in repressive and genocidal domestic policies in Xinjiang and Tibet and pollutes the environment more than any other country. These behaviors are viewed unfavorably by international regulators, increasing the risk of economically damaging sanctions being placed on China for as long as that activity persists. Furthermore, existing Section 301 tariffs could be increased and applied to more products, making imports totally uncompetitive.

Sanction-associated risks are particularly salient when considering China's Anti-Foreign Sanctions Law which codified a number of unappealable retaliatory measures that can be taken to punish businesses from countries that impose sanctions on China.

Adding these other risks to *Foreign Policy's* aforementioned assessment of China's 24.11% 10-year risk of invading Taiwan, we estimate the overall risk to U.S. firms to be around 35% over 10 years or about 3.5% per year. The magnitude of U.S. imports from China further increases the risk. Imports from China, adjusted to the U.S. price level, equal about 30% of U.S. manufacturing output. If all of those imports are cut off to all U.S. companies, it will take years for domestic sources to fill the gap.

U.S. firms should evaluate these risks when making sourcing decisions in China. If the risks and costs associated with CCP control, cross-strait brinksmanship, or exposure to sanctions are viewed as too high, reshoring becomes an excellent option.

Middle East (GPR: 4.5%/year)

The Middle East has been a region in flux for the past 80 years, post-decolonization. Regime change and near constant conflict have produced a tendency towards authoritarian governance as well as a hampered level of development throughout much of the region when compared with similar post-colonial development in other regions. This regional instability presents a moderately high level of geopolitical risk for U.S. manufacturers. The primary risks of sourcing in the Middle East stem from the elevated risk of terrorism, armed conflict, regime instability, and backsliding of regional democracies.

The threat of terrorism is pervasive throughout the Middle East with many Islamic Fundamentalist and nationalist groups calling the region home. Moreover, due to America's Global War on Terror, U.S. firms are especially at risk of terrorism. Risk varies across countries, but the regional risk remains extremely high, U.S. firms must keep this in mind if deciding to manufacture or source in the Middle East. Similarly, there are several ongoing armed conflicts in the Middle East posing a risk to supply chains and the physical security of both capital and personnel in the region. Conflict between Israel and Palestine, wars in Yemen and Syria, as well as continued violence in Iraq perpetrated by ISIS/ISIL, expose firms to risks seldom found outside of the Middle East.

Many Middle Eastern countries have authoritarian governments, made secure by rents gleaned from oil extraction. As the world becomes greener, demand for petroleum-based goods will begin to decline, lowering the amount of wealth available to oil-rich Middle Eastern autocracies and heightening internal instability, even in the affluent Gulf States. Additionally, in recent years the two most historically stable regional democracies – Israel and Turkey – have been experiencing democratic backsliding under Presidents Benjamin Netanyahu and Recep Tayyip Erdogan respectively. This poses risk to American companies who invest in the region as increasingly unstable governments are less able to resist the conflict so pervasive in the region. Less democratic regimes tend to have poor human rights standards and heightened levels of corruption, exposing them to international sanctions that hurt trade.

While the Middle East is home to reliable trading partners in the cases of Israel, Turkey, and the Gulf States, when the region is appraised holistically the geopolitical risk to U.S. firms is higher than most comparable alternatives. When compared directly with U.S. based manufacturing there is almost no advantage to sourcing in much of the Middle East.

Russia (GPR: 100%/year)

Sourcing in Russia poses the maximum geopolitical risk to U.S. firms. Under the authoritarian rule of Vladimir Putin, the Russian Federation has positioned itself as an international pariah through its disregard for human rights and bellicose foreign policy. This has been most recently exemplified by the Russian invasion and occupation of Ukraine which has resulted in almost total decoupling between the U.S. and Russia.

Human rights abuses and invasions of neighboring countries have led many countries to impose a host of sanctions on Russia, restricting trade and access to foreign markets. Russia has few trading partners and a particularly curtailed trade relationship with the United States. U.S. firms who may choose to do business in Russia should expect a great deal of arbitrary government interference, unpredictable access to international trade, and potential freezing or forfeiture of assets.

Long distances and aging infrastructure present risks to supply chains into and out of Russia. U.S. firms must contend with an elevated degree of supply chain risk if they wish to source their products in Russia. Additionally, Russia's primary trading partner is China, which ties them economically to the primary strategic rival to the U.S. Any friction between the U.S. and China will have second-order manifestations in the U.S.-Russia relationship.

Following its invasion of Ukraine in 2022, the Russian military has foundered, losing more soldiers in one year than in all Russian conflicts post WWII. Such bloodshed has led to increased internal tensions from families of the men who are conscripted to fight, as well as from leaders of units bearing the brunt of the fighting. Yevgeny Prigozhin and Wagner Group's June 23rd mutiny demonstrated the growing regime instability Putin is facing due to his decision to invade Ukraine. Because the exact extent of internal discontent is difficult to appraise, Russia is a very unpredictable and hazardous location for U.S. firms to source from across all areas of risk exposure.

U.S. firms should avoid sourcing in Russia. Russia shares many of the same risks as other potential source countries who are politically opposed to the U.S., however, the restricted access to the Russian market due to sanctions, relatively small population and labor force, and heightened internal conflicts mean it does not share any of the benefits found in alternative source locations.

Summary:

The level of present risk and the amount of risk to tolerate are decisions that must be made by a firm weighing its specific needs. The above analysis demonstrates broad exposure to geopolitical risk in each of the described countries and regions. The geopolitical risk (GPR) probability is a key input to the revised TCO Estimator due to launch in 2023. The Estimator will use GPR to calculate the expected value of lost margin on revenue lost due to stocking out of a component or product. In some cases that loss may offset the lower price paid for the offshore component or product. Below is a library of articles and indices that may be helpful in conducting independent analysis of firm-specific geopolitical risks:

Category	Source	Organization	PubYear
Geopolitical			
Economic Policy	Link	Economic Policy Uncertainty Index	2023*
Violence & War	Link	Geopolitical Risk Index	2023*
Freedom	Link	Freedom House	2023†
State Fragility	Link	Fund for Peace	2022*
Terrorism	Link	IEP	2022*
Human Rights	Link	Human Rights Watch	2022*
Protests	Link	Carnegie Endowment for International Peace	2023*
Global Conflicts	Link	Council on Foreign Relations	2023*
Environmental			
Policy	Link	IPCC	2022
Emissions	Link	World Bank	2022
Performance	Link	OECD	2022*
Sustainability	Link	Yale	2022†
Ecological Threat	Link	IEP	2022*
Resources	Link	UN International Resource Panel	2019†
Trade			
Commodities	Link	International Monetary Fund	2023*
Regulatory Quality	Link	World Bank	2023*
Trends	Link	Thompson Reuters	2022†
Crime and Corruption			
Corruption	Link	Transparency International	2022†
Organized Crime	Link	Global Organized Crime Index	2022†
Travel			
Safety	Link	U.S. Department of State	2023*
Health	Link	International SOS	2022*
Human Trafficking	Link	U.S. Department of State	2022
Intellectual Property			
Data Protection	Link	UN Conference on Trade and Development	2023*
Section 301	Link	U.S. Trade Representative	2022
Incidence	Link	EUROPOL	2022†
Vulnerabilities	Link	National Bureau for Asian Research	2021
Industrial Safety			
Workplace Fatalities	Link	Arnite Health and Safety	2021
Workplace Accidents	Link	UN Global Impact	2021
Supply Chain			
Raw Materials	Link	World Bank Data	2023*
Shipping	Link	DHL	2022†
Sustainability	Link	MIT	2022

* Indicates a source that is regularly updated. † Indicates a report published annually.