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Research Center
Strategic Change
"Franco Fontana"

GEOPOLITICAL RISK OBSERVATORY

White Paper

A Geopolitical Risk Index to Map Global Challenges

Luiss Report
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Foreword

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The international system is experiencing a prolonged phase of transition, in which the absence of a clear and shared order generates strategic uncertainty. The Cold War is long over, but the equilibrium that emerged in its aftermath – centred on American primacy and a liberal rules-based framework – has eroded without giving way to a new, stable architecture. We live instead in an age marked by multiple crises and multipolar frictions, where power is exercised through disruption and ambiguity, and where the notion of "global governance" is more aspiration than reality.

In this context of growing fragmentation, the ability to understand, anticipate and measure geopolitical risk becomes essential. It is no longer enough to rely on experience or on diplomatic and institutional procedures: foresight, realism and adaptability are vital not only for States, public institutions and international organizations, but also for private actors.

Italian companies – particularly the many of them which have significant international exposure – are called upon to navigate risks that evolve rapidly and defy conventional models of prediction. It is precisely to support them that Luiss Guido Carli University has established the Geopolitical Risk Observatory (GRO), housed within the Franco Fontana Research Center on Strategic Change. GRO's purpose is clear: to offer a rigorous, flexible, and operationally useful framework for interpreting geopolitical developments and translating them into timely business intelligence.

At the heart of the Observatory's work lies the Geopolitical Risk Index – a quantitative tool developed in-house, rooted in expert judgment, and calibrated through a systematic model. What makes this index distinct is not only its methodological precision, but its strategic orientation: it is designed to provide near real-time visibility on the geopolitical dynamics affecting the countries and regions where they operate. This enables decision-makers to anticipate shifts, reassess exposure, and optimise trade flows and investment strategies accordingly before risks emerge.

This index is focused on countries of priority interest to Italian business, and will be complemented by qualitative assessments of macro-risk scenarios, with particular attention to critical theatres for the Italian economy. Once fully operational, GRO will aim to adapt to the global geopolitical landscape ensuring swift and targeted response to changing risk profiles. Flexibility will be a guiding principle of the GRO.

Where needed, our index will adapt its model, its frequency of updates, or its analytical approach to meet specific requirements of our audience.

In an increasingly unpredictable world, decision makers and companies must be equipped not only with courage and competence, but with clarity. With the GRO, we seek to offer them a compass – rooted in realism, responsive to change, and grounded in a deep understanding of global dynamics. This is not about avoiding risk altogether. It is about recognising it in time, understanding its nature, and acting accordingly.

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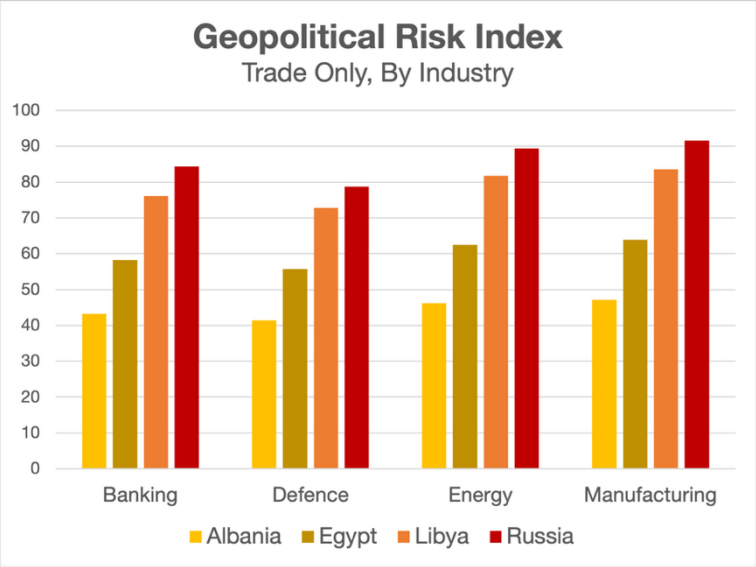
1 – Introduction

In an era marked by geopolitical fragmentation, strategic ambiguity, and the erosion of multilateral norms, the ability to assess and respond to geopolitical risk has become a critical requirement for both public and private actors. For Italian businesses—many of which operate across borders and are deeply embedded in global value chains—this need is particularly acute. The Geopolitical Risk Observatory (GRO), established at Luiss Guido Carli University, responds to this challenge by offering a structured, dynamic, and industry-sensitive framework for understanding and managing geopolitical risk. At the core of this initiative lies the Geopolitical Risk Index (GRI), a tool designed to translate complex international developments into actionable intelligence for Italian enterprises. The GRI is a country-by-country index that quantifies geopolitical risk through a structured model grounded in expert judgment. Unlike many existing indices that rely on static indicators or backward-looking data, the GRI incorporates a layered causal model that captures both the current challenges and the evolving dynamics of international politics. It is not merely a descriptive tool, but a forward-looking instrument that enables users to anticipate shifts in the geopolitical landscape and adjust their strategies accordingly.

This white paper introduces the index and outlines the rationale behind its development. It begins by situating the index within the broader context of global uncertainty and the growing demand for business-relevant geopolitical analysis. The paper then explains the conceptual and methodological foundations of the index, detailing how it integrates structural, situational, and current risk factors into a coherent framework. Special attention is given to the way the index differentiates between types of business exposure—namely trade and foreign direct investment (FDI)—and how it tailors its outputs to four key sectors of the Italian economy: banking and finance, energy, defence, and manufacturing.

Figure 1 below provides an initial idea of the index, by showing its ratings of four example countries, grouped by the industry of the Italian company considering exporting goods or services to those countries.

Fig. 1: ***Geopolitical Risk Index, by industry, trade only, four countries***



The GRI is not a one-size-fits-all tool. It is designed with a clear user profile in mind: businesses seeking to assess the geopolitical risks associated with specific countries and sectors. To this end, the index is disaggregated into ten distinct versions, reflecting the intersection of two types of business operations (trade and FDI) with the four strategic industries mentioned above, plus a generic version for broader applicability. This structure ensures that the index remains relevant and practical, offering insights that are both sector-specific and operation-sensitive. Figure 2 below shows a world map that reflects our ratings of nine countries, for companies in the Banking and Finance sector considering exporting their services to those countries.

Fig. 2: ***Nine countries rated from the perspective of Italian companies in the Banking and Finance industry, which are considering trading with those countries.***

The paper proceeds in several stages. Following this introduction, the first section explores the macro-level trends that define today's geopolitical environment, including the decline of global governance, the rise of protectionism, and the intensification of great power competition. These dynamics form the backdrop against which the GRI was conceived. The second section delves into the methodological challenges of measuring geopolitical risk and explains how the GRI addresses them through a multi-dimensional model. This includes a discussion of three causal layers—structural factors, proximate factors, and current challenges—and how they interact to produce a nuanced risk assessment.
Subsequent sections provide a detailed breakdown of the model's architecture, including the three main risk dimensions (security, regulatory, and integrity) and the aggregation methods used to generate country scores. The paper also discusses how the model accounts for the specific vulnerabilities of different types of businesses, mapping risk categories onto critical business functions such as supply chains, regulatory compliance, and profit repatriation. The final sections present the results of the index's initial application to a set of nine countries of strategic interest to Italian business. These results are visualized through comparative charts and maps, offering a snapshot of how different countries score across industries and types of business operations. The paper concludes with

reflections on the index's potential applications, and the future directions of GRO's work.
In sum, this white paper offers both a conceptual foundation and a practical guide to the GRI. It is intended not only to introduce the index, but to demonstrate its value as a decision-support tool in an increasingly volatile world. By combining methodological rigor with strategic relevance, the GRI aspires to become an indispensable resource for Italian businesses navigating the complexities of global risk.

2 - Global Uncertainty, Measuring Macro Global Trends and Risks

Manfredi Valeriani, Ivan Zaccagnini

Navigating the international system is becoming more and more challenging for private actors. The international system is characterized by high levels of contestation that lead to an intensifying interplay of geopolitical fragmentation, persistent regional tensions, and the rise of increasingly protectionist national strategies, creating an environment of heightened global uncertainty. These interconnected dynamics are reshaping crucial sectors of international affairs and established geopolitical alliances, with the economic and diplomatic choices of major powers, including the United States, triggering significant ripple effects across multiple regions and sectors.
This evolving landscape reflects a challenged global order, with perceptions of a decline in the Western-led system and the emergence of a multipolar or more fragmented world where various powers contest, set, and enforce regional rules and norms. Such a shift away from a unipolar or stable multilateral system has contributed to a series of geopolitical contestations with both political and military dimensions, exemplified by the ongoing conflict in Ukraine and sustained tensions in the Middle East. This less certain global equilibrium, marked by geopolitical risk levels significantly above historical averages, also fosters an environment conducive to the emergence or escalation of multiple conflicts and crises in various regions.
Concurrently, established global governance mechanisms are facing substantial challenges, evidenced by a decline in multilateralism and the diminished capacity of international institutions to play an active role in maintaining global order and addressing shared problems. The contestation also has deep national political roots, as antisystem parties and political forces gain traction in several countries, potentially leading to increased domestic instability and further fragmentation at the international level.
This also has implications for global dynamics the global trade and financial systems are experiencing significant stress, with the rise of nationalist and protectionist policies directly confronting the ongoing globalization of value chains, goods and services, leading to concerns about stifled investment,

dampened consumption, and potential reductions in global output. Proposed U.S. policies, such as potentially significant tariffs on goods from China and other trading partners, could upend the existing global trade status quo, accelerating a rewiring of trade flows and supply chains as businesses adapt to a more fractious and uncertain globalization. This trend reflects a broader shift where geopolitical distance increasingly impacts bilateral trade, with commerce between rival blocs declining while trade among allied nations grows, challenging the previously dominant patterns of globalization.

Across leading institutes, the major geopolitical risks identified for 2025 reflect this world marked by fragmentation, persistent conflict, and intensifying great power competition. The most prominent risk, highlighted by the World Economic Forum, Eurasia Group, and Stratfor, is the proliferation of state-based armed conflict-including proxy wars, civil wars, and terrorism-driven by unresolved crises in Ukraine, the Middle East, Sudan, and the Sahel to which we can add Kashmir, Myanmar and Nord Kivu. This is closely linked to the rise of geoeconomic confrontation, as the U.S., China, and the EU increasingly deploy tariffs, sanctions, and investment restrictions as instruments of geopolitical leverage, leading to supply chain disruptions and the breakdown of global trade coherence.

The U.S.-China rivalry is transforming the global economic and technological landscape, with decoupling in sectors like semiconductors and AI forcing third countries to navigate a complex strategic crossfire. Eurasia Group and KPMG further emphasize the risk of a "G-Zero" world, where the absence of clear global leadership and the decline of U.S. influence create a vacuum that fosters instability and enables the rise of alternative blocs such as BRICS. Russia is identified as a leading rogue power, leveraging military, economic, and hybrid tactics to undermine Western cohesion, while deepening ties with China, North Korea, and Iran. The risk of escalation due to ambiguous red lines-especially in the Middle East, Taiwan Strait, and South China Sea-raises the spectre of broader military confrontations.

Compounding these are economic risks, such as rising protectionism, inflation, and fragile political coalitions, as well as technological threats including AI misuse, cyber-attacks, and the concentration of digital infrastructure. Political violence, polarization, and disinformation campaigns are also flagged as amplifiers of instability, eroding social contracts and increasing the likelihood of both domestic and international unrest. Collectively, these risks point to a turbulent future ahead, with military, economic, and political implications reverberating across global systems.

In today's increasingly uncertain and contested international system, private actors-ranging from multinational corporations to small and medium enterprises-are compelled to closely monitor geopolitical developments and adapt their strategies accordingly. As state-driven rivalries, shifting alliances, and volatile regulatory environments disrupt traditional business models, these actors must assess how geopolitical changes such as trade wars, sanctions, supply chain disruptions, and regional conflicts could impact their operations, investments, and supply networks.

Understanding these inherent risks is essential for mitigating potential losses, ensuring business continuity, and maintaining compliance with evolving international norms. Consequently, private actors are investing in risk assessment tools, scenario planning, and geopolitical intelligence to navigate this complex landscape and safeguard their interests amid global instability.

2.1 - Mapping Risks Globally

Tracking conflicts around the world is an extraordinarily complex and challenging task, given the sheer number, diversity, and evolving nature of crises in different regions. The difficulty stems from several factors: the fragmented and often politicized flow of information, the dispersed and sometimes hidden character of modern warfare, and the rapid emergence or escalation of new flashpoints. Many conflicts are localized, involving non-state actors, proxy groups, or hybrid tactics that blur the lines between war and peace, making comprehensive monitoring and analysis even more difficult.

Despite the proliferation of digital tools and real-time conflict data platforms, such as those provided by the Armed Conflict Location and Event Data Project (ACLED) and CrisisWatch, the global picture remains piecemeal and subject to gaps in reporting and verification. Nevertheless, some major hotspots stand out due to their scale, geopolitical significance, and humanitarian impact. The ongoing Ukraine-Russia conflict continues to dominate headlines with its implications for European security and global energy markets. In the Indo-Pacific, tensions are rising not only between China and Taiwan but also between India and Pakistan, as well as on the Korean Peninsula, all of which carry the risk of broader regional or even nuclear escalation.

Across the Sahel and Central Africa, persistent violence in countries such as Sudan, the Democratic Republic of Congo, and the broader Great Lakes region is fuelled by weak governance, resource competition, and the proliferation of armed groups. The Middle East remains a perennial flashpoint, with the Iran-Israel rivalry, ongoing conflicts in Syria, Lebanon, and the Palestinian Territories, and the risk of direct confrontation drawing in global powers. Other significant conflict zones include Libya, where instability persists despite international mediation efforts, Haiti, which faces spiralling gang violence and political collapse, and Myanmar, where civil war and humanitarian crises continue unabated. These hotspots underscore the immense difficulty of maintaining an accurate, real-time understanding of global conflict, yet they also highlight the regions where the risks of escalation and humanitarian catastrophe are most acute.

Not all conflict zones exert the same influence on global dynamics, as the implications of violence vary significantly depending on a country's integration into international systems and its strategic importance. For example, the crisis in Haiti, while catastrophic in humanitarian terms-with widespread violence, state collapse, and millions in urgent need of aid-remains relatively contained in terms of its effect on global politics and economics. The violence there has led to the near-total breakdown of basic services, mass displacement, and acute food insecurity, demanding urgent international humanitarian mobilization, yet it does not

fundamentally alter the balance of global power or disrupt international trade flows. In contrast, regions like the Indo-Pacific, which serve as arteries for global commerce and are home to major powers, present risks with far-reaching economic and strategic consequences.
Any escalation of tensions or conflict in the Indo-Pacific-currently a tense but largely stable region-could trigger significant disruptions to global supply chains and trade, with ripple effects felt worldwide. This disparity underscores the necessity for private actors to assess geopolitical risks in a tailored manner, considering both the specific characteristics of each conflict and their own exposure. As a first step, it is essential to categorize areas of conflict and confrontation, distinguishing between those with primarily local humanitarian impacts and those with the potential to reshape global economic and political landscapes.
So far, indexes of risks tend to focus mostly on country profiles, rarely considering how global politics might affect an industry sector as well as the country itself. This paper shows the methodological and practical implications of developing an index that can merge all these dimensions.

2.2 - Transforming external factors into working variables

Developing a geopolitical risk index is a complex task, owing to the plethora of factors that are potentially relevant. The next sections of this paper are devoted to explaining how the index tackles the challenge from a methodological point of view. When it comes to global politics, a challenge is posed by the fact that the number of variables to be considered is as large as global politics itself, since changes in the international system usually have repercussions for national and local dynamics.
A full understanding of the main risks connected to geopolitical trends and events can be understood only through the lenses of a qualitative analysis that vertically considers the multiple facets of the country's profile. However, a certain level of generalization and comparison can be achieved by merging a series of key dimensions that go to the heart of geopolitical effects on each country.
The exposure to global dynamics is given mainly by factors of dependency and integration in global politics. The index we develop summarizes these factors into three main categories. The first dimension encompasses those factors that mark the general position of a country in the international political scenario. In a fragmented world, alignment with one block or another is becoming more and more important in determining the risk of being targeted by sanctions or other coercive instruments. A second dimension takes into account the fact that the more a country depends on partners for core aspects of its functioning or economy (i.e., the energy sector) the more exposed it would be to geopolitical changes. At the same time, although not in direct dependency, being highly integrated in global markets and global value chains might increase generalized risks of market and supply shocks and might heightened the effects of trade barriers, sanctions and diffuse protectionism.

A final dimension to consider is the material factors that might deter external actors from engaging in hostile actions against the country under analysis. These factors relate to the military capabilities of a country, and how they are perceived abroad. Without delving too deep into academic debates on how power can increase insecurity as much as decrease it, for the purposes of gauging its exposure to external risks, we can take a state perceived as powerful as facing lower threats than a weak or fragile one.
Converting these dimensions of external exposure into variables is challenging. However, there are various indexes and variables that can be considered to assess risk exposure.

1) The first dimension to be considered regards the alignment of a country. The growing polarization of the international system is creating different blocks that compete on the global stage. While in the future a stable multipolar system could be possible, the status of the system is highly volatile. Belonging to one side or the other can expose a country to external sanctions, tariffs or other malicious measures. The new Trump administration is showing that even long-standing partnerships and alliances are questioned. However, even in such an uncertain framework allies get relatively better treatment than adversaries. A first dimension is therefore a measure of the alignment of a country in the international system both direct (membership in certain organizations) and indirect (all the interchange with countries belonging to the other side).

2) The second dimension to consider describes the dependency of a country on Global Value chains, especially in critical sectors such as energy, raw materials and technology. It is not easy to measure such values are there are multiple factors that are co-dependent. For instance, a highly renewable energy mix, while granting major independence from fossil fuel producers, still hides patterns of dependency on China, that today's remains by far the main producer of renewable energies' technologies.

3) Lastly, the final dimension to consider is related to conflicts and hard power. The presence of conflict is usually grasped by indexes of internal political risk. However, a geopolitical risk index that focuses on global dynamics should be able to reflect ongoing and potential regional conflicts that might directly involve or impact the country. Such risks could also be mitigated by the country's ability to deter adversaries. Deterrence is hard to measure, as it is a mix of material factors and external perceptions of those factors. However, more powerful states are usually also perceived as such, and higher military capabilities usually align with a general ability to deter adversaries. Also,

membership in alliances and defence communities and the ability to deploy strategic weapons (e.g.., nuclear weapons) can help deter aggression.

These dimensions and variables help translate global geopolitical trends into factors that can play a key part in the methodology of the geopolitical risk index, described in the rest of this paper.

3 - Methodology of GRO's Geopolitical Risk Index

Carlo Gallo

This section provides an overview of the methodology of the Geopolitical Risk Index (GRI). As mentioned in Section 1 above, its key features include a reliance on the qualitative expert judgement of country or regional analysts; an explicit, structured causal model for the processing of those judgments; and a very deliberate orientation towards serving specific groups of users – Italian businesses with international interests. More precisely, we produce five main versions of the index, based on the industry of its intended business user:

1. Overall (general business),
2. Banking and finance,
3. Energy,
4. Defence,
5. Manufacturing.

Each main version is further differentiated into two sub-versions: one for businesses that simply aim to export into the countries under analysis, and one for businesses that have, or are considering making, direct investments in those countries. So, in total, we have 10 versions of numerical estimates for each country. As mentioned in the opening pages of this white paper, our index improves over existing alternatives in in three main ways:

- It pays explicit attention to geopolitical and international risk factors (See Section 2 above for a discussion of those dimensions).

- Our methodology goes some way towards addressing the specific needs of selected industries and types of business operations. This makes our index more tangible and practically relevant compared most other indexes, which cater for a loosely defined and/or very broad target audience.

- Our index considers fast–moving situational factors in addition to structural ones, allowing for a forward-looking, timely and realistic tracking of risk over time. By contrast, most existing indexes either: 1) describe the ***existing*** features of a country's business environment; or 2) rely on a "laundry list" of slow-changing structural factors.

3.1 - Scope of application of the Index

Our index is a sub-type of a much wider class of cross-country indexes or "indicators", which have received important academic attention over the last

decade or so (Laurent, 2018; Merry, 2016; Merry et al., 2015). It is important to reflect on the scope of application the index.
The main benefit of a cross-country index is the ability to quickly compare a large number of countries based on a unified methodological framework. Unfortunately, there is an inescapable trade-off between wide comparability and the depth of the assessment of each individual country. Global, cross-country indexes are not meant to replace in-depth analysis.
Any methodology attempting to model such a complex phenomenon as geopolitical risk, which involves rather nebulous socio-political concepts, is bound to remain contestable. The fact that our index is tightly geared towards specific sets of users certainly helps sharpen the choices involved. However, it is inevitable that any such methodology will reflect specific theoretical and normative preferences.
Despite the numerical format of its output, it is important to remember that our index relies on expert judgement, which is qualitative and, to some extent, subjective**.** Expert analysts are tasked with estimating variables that are defined at a relatively high level of abstraction. This is necessary in order for the model to apply to an extremely diverse set of socio-political conditions around the globe. Analysts use their expertise to "translate" or "apply" the concepts enshrined in each variable to the specific context of a given country.
This means that, when modelling geopolitical risk, there can be no detailed formula that works in blanket fashion for every country. Indeed, it is important to leave sufficient room for nuanced, expert judgment to mitigate against the excessive rigidity of one-size-fits-all approaches.
Provided that analysts are adequately trained, and if the internal logic and architecture of our model matches the purposes of the tool (as we think they do), our index can still provide a unified framework through which many countries can be compared quickly, if only roughly. Our index is a tool that has its place within a larger set of risk assessment methods and approaches. It is best understood as a way to quickly notice changes that may warrant more in-depth analysis.

3.2 - Other methodological approaches

Our index, relying on expert judgment and on structured causal modelling, varies significantly from several other popular approaches.
Many other indexes in a similar space utilize lagging indicators, such as the World Bank's Worldwide Governance Indicators, data from the IMF, or from such think tanks as the Heritage Foundation (Index of Economic Freedom) and many others. One problem with this method is that the indicators they use are called "lagging" for a reason. They may be released once or twice per year and typically reflect the situation as it was several months before they are released. So, this approach is hardly suitable for tracking risk levels in a timely fashion.
At the opposite end of the "timeliness" spectrum, indexes that rely on algorithms, and on artificial intelligence in particular, purport to track relevant issues as they are discussed in open internet sources and to update risk levels (almost) in real time. Their typical application is to track ***security*** risks, as opposed to assessing the wider range of geopolitical risks, although some outfits claim to cover geopolitical risk as a whole.

The concept of "risk" often embedded in those products revolves around "event counting" – i.e. risk is deemed to be "high" if relevant incidents have occurred frequently, in a given location, in the recent past. This conception of risk appears very limited, as it is unable to account for situations where a veneer of stability is enforced by an authoritarian ruler, for example, leading to a dearth of instability incidents. In such cases, popular discontent may well be growing under the surface, building up a propensity for instability, but remaining undetected by "event count" approaches. Political violence tracking initiative "ACLED" is mostly based on such event counting.

Another popular conceptualization of geopolitical risk that underlies algorithm-based or statistical indexes equates it with the frequency with which certain words are mentioned in media reports. A widely cited example, developed by Dario Caldara and Matteo Iacoviello (2022), tracks the frequency of words relating to "wars, terrorism, and any tensions among states" in three U.S. newspapers dating back to 1900. They also have a separate index focusing on recent media mentions only (from 1985 onwards), which draws from a larger number of U.S., Canadian and UK newspapers.

However, their aim is different from ours. They want to establish the effect of geopolitical risk, as they measure it, on financial and economic variables at the general, global level. Instead, we want to assess the level of geopolitical risk posed by ***each country*** to businesses that want to trade with it or invest in it. Moreover, their method is historical, while our index is forward-looking. So, Caldara and Iacoviello's approach does not really apply to our purposes. Nevertheless, others do purport to provide forward-looking geopolitical risk assessments, including on a country-by-country basis, and track geopolitical risk by counting the frequency of media mentions.

This approach appears to have important limitations. The media may report on: 1) developments that have already happened; or 2) pundits' assessments of threats that seem topical at the time. In the former case, the media is backward looking. In the latter case, assuming that an article's focus on a given threat to the exclusion of others was justified, it is the quality of the reasoning attached to the assessment that should count, not the frequency of mentions. Risk assessment is about the likelihood of future developments based on a deliberate causal model. Also, the quality and quantity of media coverage varies widely across different countries, particularly among emerging and frontier markets. This would seem to impair the consistent application of this approach, on a country-by-country basis, across the globe.

Finally, our purposes are not compatible with other types of statistical analysis, as we are not trying to estimate the average statistical tendency across a given population of cases. We are seeking to rate each country individually and specifically.

For all the above reasons, and given our purposes and resources, our index relies on expert judgment and on a methodology that harnesses it for the assessment of business-relevant threats. In particular, our index is an example of a ***structured*** index: It involves the causal modelling of geopolitical risk. As explained below, our model has multiple dimensions and multiple layers. Analysts use their expert

judgement to feed inputs into the model, which is then elaborated through a very deliberate causal structure, geared towards matching the requirements of specific users of the index.
This contrasts with the more traditional and widespread ***unstructured*** type, where country analysts are only given broad guidelines to help them assign quantitative risk levels to their countries, based on a "laundry list" of factors.

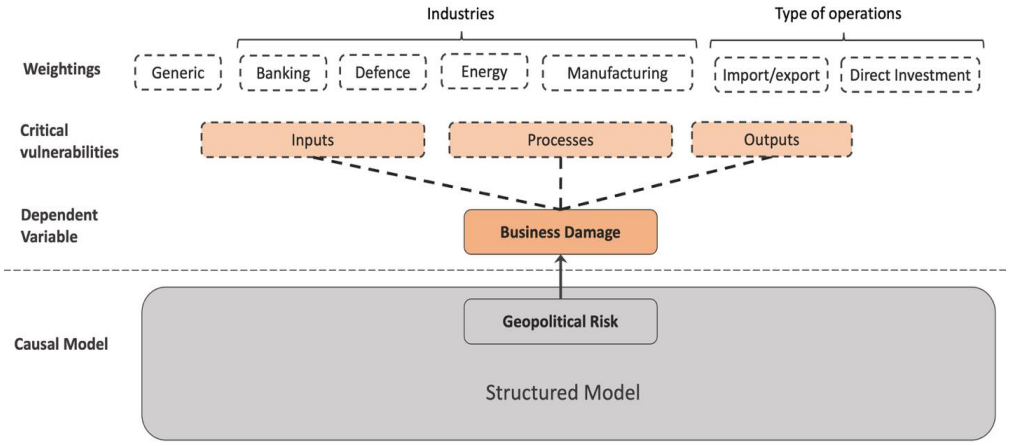
3.3 - Whose risk?

Any risk assessment exercise, including our index, relies on a prior definition of what constitutes "risk" ***for the expected users*** of the assessment. As mentioned, the reference audience of our index is made up of businesses with international interests - both generic ones and those belonging to the four industries listed above. The index is designed to help them gauge the likelihood and extent of business damage they would suffer if they invested in, or traded with, any given country.
Before we discuss any geopolitical risk factors, we need to define what constitutes "business damage" for our reference audience. To that end, we consider a range of critical vulnerabilities that most businesses tend to worry about (see Table 1 below), and then we evaluate how important each tends to be for our reference audiences.
Table 1: ***Critical vulnerabilities for a generic business***

INPUTS	**PROCESSES**	**OUTPUTS**
Maintaining / improving… 1.Physical (land, offices, plants, …) 2.Raw materials 3.Components 4.Energy	Maintaining / improving… 1.Human (employees and contractors) 2.Trademarks, Patents 3.Brand image and reputation	Maintaining / improving… 1.Selling (goods and/or services) 2.Getting paid 3.Taxation (formal/informal) 4.Repatriating profits

These vulnerabilities vary depending on the type of activity that it is conducted abroad. More precisely, we assign weights to each critical vulnerability according to the degree of importance it tends to have for: 1) a generic business seeking to trade with a country; 2) a generic business investing directly into the country; 3) trading businesses belonging to each of our four reference industries (listed above), and 4) direct investing businesses belonging to each of the four industries.
We then map our main risk categories – security, regulatory and integrity (see Section 5 below for more on these categories) - onto those weighted critical vulnerabilities. Thus, we evaluate which type of risk tends to impact which type of vulnerability. This gives us a rough indication of how to connect risk factors to levels of damage that are somewhat tailored to each of our reference groups of users. As a result of this process, the security, regulatory and integrity risk

categories estimated for a generic reference audience get tweaked in different directions for each of the more specific reference groups.
Our model also allows for the possibility that a risk factor may be ***directly*** applicable to a specific group of users, as opposed to that effect being filtered through its impact on the generic reference class. For example, a government may be considering new regulatory restrictions that are specific for foreign banks. In that case, we want to assess that risk factor in its direct relevance for our banking and finance reference group.
This initial work, aiming at defining what constitutes "risk" for the expected users of our index, represents the "semantic" portion of our model (upper part of Figure 4 below), as social science methodologist Gary Goertz would call it (Goertz 2020). This step is foundational for, and preliminary to, the design of the causal portion of the model, which we turn to.
Fig. 4: ***The semantic part of our model (above the dotted line)***



3.4 - Causal modelling

Causation is central to our notion of risk assessment: If the goal is to assess the likelihood of business damage, we need to investigate the possible causes of that damage (more on this in Gallo 2025). For our index, we only consider ***(geo)political*** causal factors, both international and domestic.
In fact, our model differentiates among three types of causation, each leveraging a different type of "risk factor" or cause, and each following its own logic, thus requiring separate modelling within our overall framework. We call them: 1) current challenges, 2) proximate factors; and 3) structural factors.
The starkest distinction here is between the first notion and the other two. Indeed, current challenges are about the ***present*** conditions of a country, while proximate and structural factors are forward-looking – they tell us something about the future. Below, we explain these differences in greater detail.

Current challenges

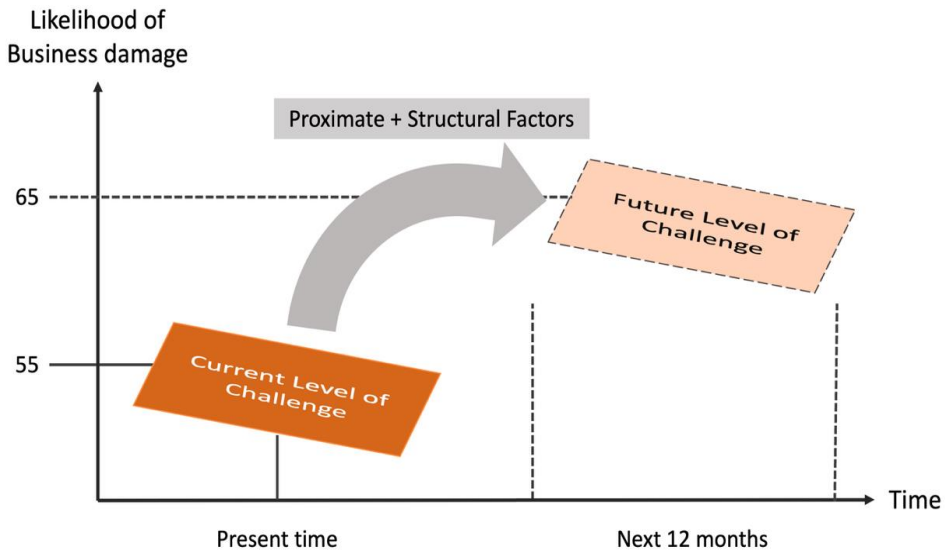
Ther first causal layer of our model is “current challenges”. This refers to ***existing*** challenges that a country is already posing to business. For example, a country may have very demanding foreign business regulations in place, such as restrictions on land ownership, local labour content requirements, etc. Similarly, a country may have high levels of corruption or organized criminal activity, or be in the middle of a civil war, be under international sanctions or subject to trade tariffs. These are all ***existing*** conditions that pose ***active*** threats to business operations. There is little uncertainty as to the level of challenge that a business faces, ***today***, if it operates in that country. "Risk analysis”, in this respect, means taking stock of existing, active threats.

However, most of the time, businesses need to assess the likelihood that existing challenges ***will change***. For example, how likely it is that new regulatory restrictions, which are ***not*** currently “on the books”, will be introduced in a given country? Similarly, we may want to assess the likelihood that an armed conflict will break out, where there is no active military fighting currently going on. Or we may want to assess the likelihood that a politician will come to power, who is promising to nationalise foreign companies and is currently an outsider, etc.

A country’s level of “business challenge” provides a baseline against which our index can assess the likelihood of change. When risk goes up or down, it is always ***from an existing level***. It would be meaningless to say that “regulatory risk is expected to increase”, for example, without a sense of current regulatory challenges. Current conditions provide a baseline that anchors the risk assessment.

In order to assess the likelihood of change – i.e. the chance that levels of “business challenge” will go up or down – it is necessary to investigate the causal factors that may drive that outcome. For our purposes, such causal factors can be distinguished into two types: proximate (or situational) and structural (see Figure 5 below). Each is examined below.

Fig. 5: ***Current level of business challenge as baseline for risk assessment***



Structural factors

Structural factors are the fundamental, slow-changing social, economic and political properties of a country and of its international position. They do not cause business damage directly, but contribute to a country's level of ***propensity*** for generating threats over a relatively long time - say, over the next 4 or 5 years.
In our model, the three international variables discussed above (see Section 2.1 on ***Mapping Risks Globally***) are structural variables that pertain to a country's international alignment, external military and technological dependency, its capacity for military deterrence, and the country's involvement in entrenched or historical conflicts. On the regulatory and integrity risk sides, we consider the health of public finances and the economy, the strength of political and social rights, and so on.
A high level of risk propensity does not guarantee that a threat will be activated. That also depends on the intent and capabilities of intentional actors, who act strategically within their current circumstances. Those intentional actors constitute what we call "proximate causes" - the third causal layer of our model (discussed below). If we imagine a hypothetical causal chain made up of various steps linking cause to effect, "proximate" causes would be the steps nearest to the outcome. Another apt term for this concept is "situational factors".
For example, it is all well and good to say that Country "A" has a high structural propensity to being invaded by a neighbouring country, or to face social unrest, or to introduce populist anti-business legislation. But all those threats remain merely ***potential*** until they are precipitated, mobilised or activated by intentional actors, often exploiting what they see an opening in the short-term circumstances they are in. An activated threat is more severe than a potential one.

Proximate/situational factors

While structural factors can affect the likelihood of different kinds of actors to emerge and gain influence, it is actors who often activate "dormant" structural factors as part of their political strategies. For example, deep seated historical animosities against a neighbouring country or against an ethnic minority can be dormant for a long time, until they are mobilized by political entrepreneurs seeking to exploit them to gain power. The rioting across the Middle East on the wake of the Danish Cartoons of the Profet in 2006 arguably involved elite actors choosing to mobilize the masses into riots in several Middle Eastern countries. This means that both structural and proximate/situational factors need to be modelled.
Proximate/situational factors revolve around ***intentional actors***, be they individual or collective, domestic or foreign. For example, such actors can be domestic or foreign political leaders, political parties, terrorist groups, criminal groups, etc. We assess the level of threat posed by these actors by looking at their intent (agenda) and capabilities. Sometimes, actors end up having a more durable and/or systemic effect, thereby shifting the structural risk propensity of one or more countries. In such cases, we amend our assessment of structural factors too.
In our model, on the security risk side, such actors may include foreign governments, foreign and domestic armed groups, and domestic social groups (e.g. with respect to social unrest). On the regulatory risk side, we consider such

actors as foreign and transnational governments, the country's own government, the domestic opposition and domestic lobbies. The assessment of the causal power of these factors comes from analysing the intent and ability of those actors, given their circumstances, to boost or reduce business challenges. We assess this layer of the model over a 6-12-month time horizon, roughly.

Timeliness

Consideration of proximate/situational factors allows us to update our risk assessment as events unfold. As Country A amasses troops near the border of Country B, the assessed security risk for Country B should go up, not because structural factors have changed, but because our model is open to the kind of situational analysis that operates on a shorter time frame than structural factors allow for. Tracking the intent and capabilities of relevant intentional actors also allows us to ***decrease*** the risk level of a country, if and when those proximate factors become defused.

Moreover, allowing for the role of intentional actors in our model enables us to account for situations where the current "level of challenge" is inconsistent with a long-term expectation based on structural factors (see Section 3.6, and Figure 12 in particular, below). Such divergence is often due to intentional actors actively countervailing structural forces. For example, let's assume that Country A's public finances are in a dire state, making it heavily dependent on foreign economic assistance for its continued political and social stability. There are three possible ways to model that country's instability risk:

1) We can rate the country's long-term, structural propensity for social and political instability as high, based on the poor state of public finances. At the same time, we can also acknowledge that proximate factors – i.e. foreign rulers interested in maintaining stability in county A – keep countering its propensity for unrest by offering massive economic aid year after year. The overall risk rating for the country would reflect both proximate and structural factors, with heavier weight granted to the former as we keep track of donors' willingness and ability to keep providing aid over a 6-12-month horizon.

2) Without consideration for proximate factors (intentional actors and their circumstances), we could assume that receiving massive foreign aid is a stable, structural feature of Country A, thus leading us to grant a low-risk rating to the country. This approach arguably underestimates risk, as it overlooks the possibility that external donors would pull their support.

3) Finally, without considering proximate factors, we could rate the country at a high risk because of its poor public finances, a structural factor, even though the threat remains ***potential***, and instability does ***not*** ensue for many years as long as foreign actors keep providing aid. This approach arguably overestimates the risk, as a propensity for risk (important as it is) is not as serious as a threat that is getting triggered or activated.

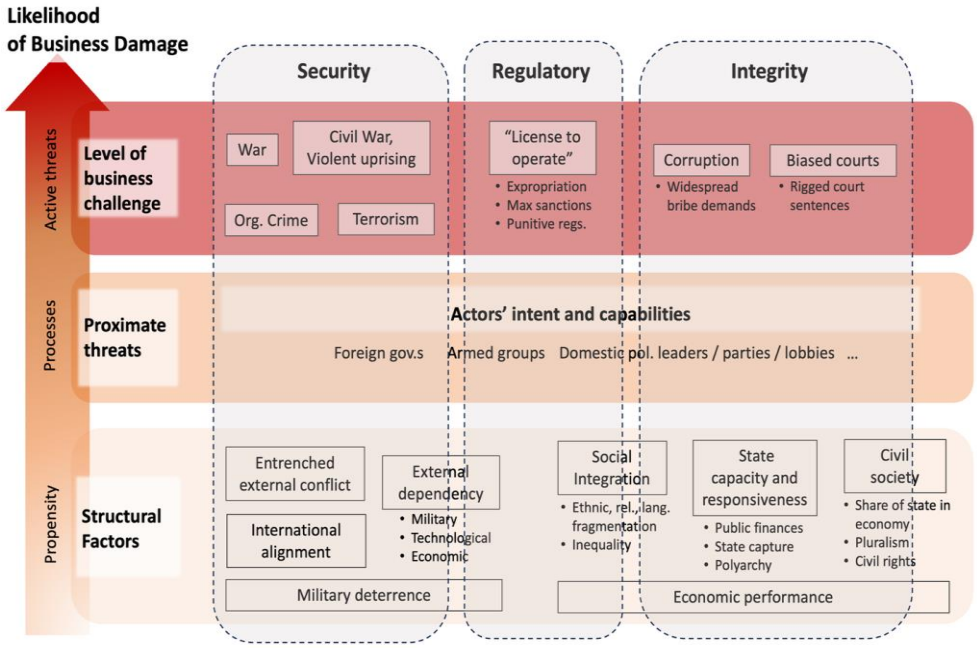
We take the first of the three approaches sketched above, which seems to be the most sensible, enabling us to track risk in a more realistic and timely manner.

To sum-up, all three types of causation – current challenges, proximate factors and structural factors – are necessary. They form the three causal layers of our model and, jointly, they provide the conceptual pillars of an effective a risk assessment tool.

3.5 - Architecture of the causal model

In this section we provide a broad outline of the architecture of the causal model, which is based on two main organizing principles: 1) causal layers – corresponding to the three types of causation discussed in the previous section (current challenges, proximate factors and structural factors); and 2) risk dimensions – the main ones being: security, regulatory, and integrity risk dimensions (more on these below). The overarching architecture of the model is depicted in Figure 6 below.

Fig. 6: ***Model architecture: three causal layers and three risk dimensions***



Several of the subdimensions displayed on the Structural Factors causal layer contribute to more than one risk dimension (security, regulatory or integrity). This is why, in the above diagram, they cut across the dotted boundaries of those dimensions.

As depicted in Figure 6 above, three vertical "themes" cut across the three horizontal causal layers. They are the main risk dimension of the model - the security, regulatory and integrity dimensions. We find that these three "themes" or dimensions help us aptly organize all of the various ways in which (geo)politics may affect business. Each is described below:

The security risk dimension

Security risk factors can affect the likelihood of business damage by causing or fostering physically violent political and geopolitical phenomena, such as armed conflict (internal or external), terrorism, widespread social unrest or rioting, and violent crime. In turn, those phenomena can inflict business damage by impacting a business' physical assets (land, plants, logistical assets, offices, etc.) or its human resources (employees and contractors). They may also affect the routes a business relies on to obtain supplies of critical inputs (raw materials, components, energy, water, etc.) or to ship products to customers. Finally, violent crime may affect the

ability of a business to derive fair value from its activities, for example in the case of suffering extorsion by organized criminal groups (which effectively acts as informal taxation).

The regulatory risk dimension

Regulatory factors affect the likelihood of business damage by causing or fostering relevant government legislation or regulations. Such regulations can be issued by a country's national or local government, or by a relevant transnational or supranational body. For example, international regulatory risk factors of the proximate kind may inflict business damage by imposing sanctions or tariffs against the country. Domestic regulations can weaken the protection of intellectual property rights (trademarks, technological patents); they can impose restrictive labour legislation (e.g. local labour content provisions), restrictive land ownership laws, or heavy environmental or technical standards. Regulatory factors can also inflict business damage by restricting the import of key materials, foreign labour and components into the country (or a foreign government may restrict the export of those elements to the country). Other examples include the setting of tax levels, imposing caps on the price a business is allowed to charge to its customers, granting subsidies to local competitors, restricting the business' ability to repatriate profits (e.g. capital controls), etc.

The integrity risk dimension

Integrity factors capture issues related to the "rule of law", including the sanctity of contracts and of the law more generally, as well as the reliability of the local court and law enforcement systems, their ability to operate efficiently and impartially. It also includes all relevant forms of official corruption, including bribe demands by public officials, rigged public tenders and contracts, the corruption of political or regulatory officials, law enforcement officers or members of the judiciary. Integrity factors can inflict business damage with respect virtually all aspects of business activity, in as much as rely on the sanctity of contracts, on the fair implementation and enforcement of laws, and on the impartial judicial review of disputes.

Aggregation strategy

The highest level of aggregation of risk scores in the model is, of course, the overall geopolitical risk score assigned to each country. As discussed above, we produce 10 versions of that country score, one for each group of users of the index. However, it is sometimes useful to also display risk scores aggregated one level down from that, at the level of the three main risk dimensions - security, regulatory and

integrity. This adds nuance compared to the single, overall figure for the country (see Figure 11, below, for an example).
The risk scores assigned to each country (both overall and broken down into the three main risk dimensions) are generated by aggregating the contribution of the three causal layers of the model (current challenges, proximate factors and structural factors – see Figure 6 above). In turn, the score associated with the proximate and structural factors layers result from the aggregation of several sub-dimensions, grouped under the main themes of security, regulatory and integrity risks. See Figures 7 and 8 below for a partial, "zoomed-in" depiction of the proximate and structural factors causal layers of the model.

Fig. 7: ***Structural factors layer of the model (partial)***

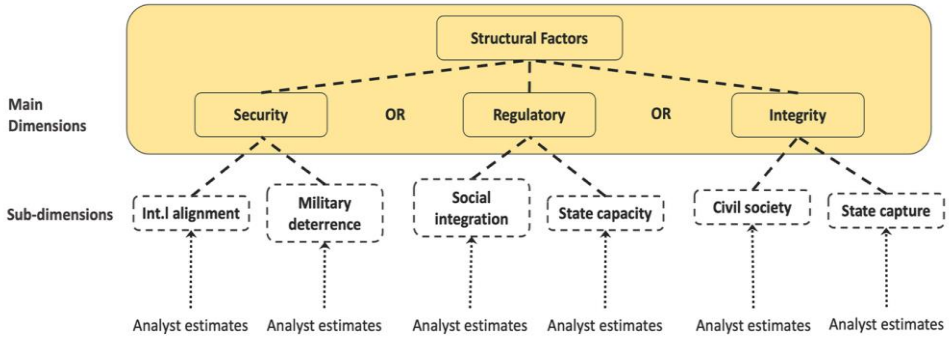
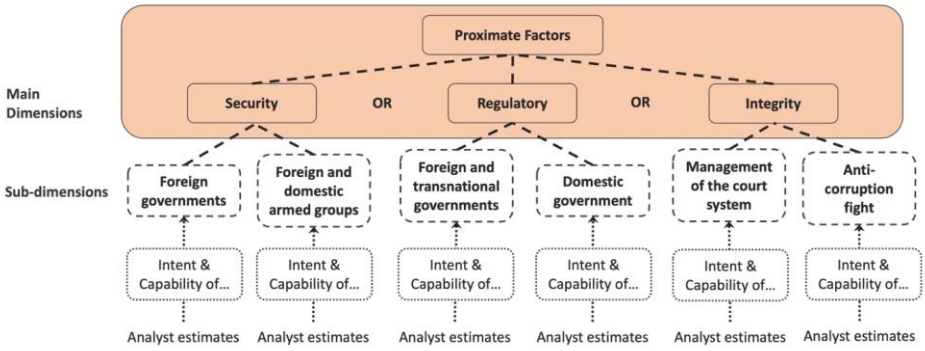


Fig. 8: ***Proximate factors causal layer of the model (partial)***



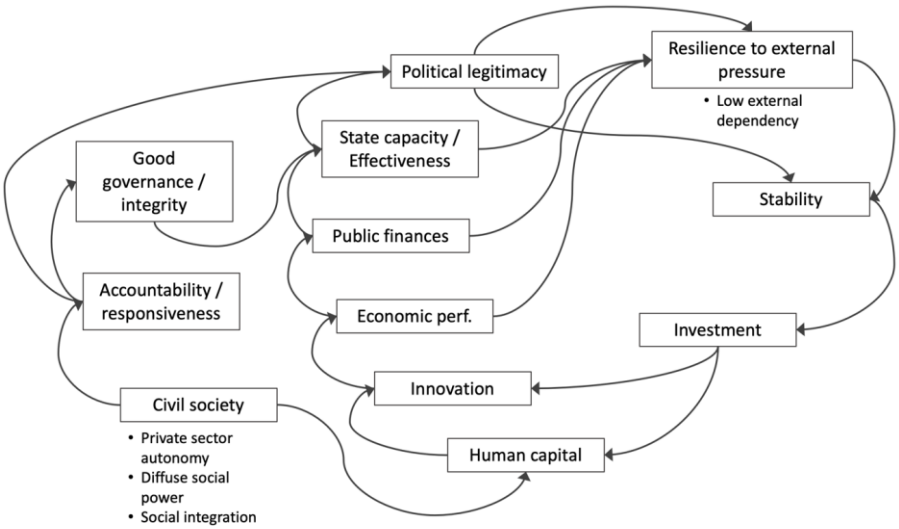
At the lowest level of the architecture, scores are assigned by country or regional analysts, who rely on their expert judgement to evaluate how a country fares along the sub-dimensions of the model.

Aggregation rule

Within each of the three causal layers of the model (current challenges, proximate factors and structural factors), the model aggregates the scores of the main risk dimensions (security, regulatory and integrity) by taking their maximum. This aggregation rule reflects the substitutability of the contribution that each dimension makes to the likelihood of business damage. In other words, it is sufficient that one of the three risk dimensions scores highly, irrespective of how the other two are doing, for the overall likelihood of business damage to also be high (and vice versa). This also means that a low score in one of the three dimensions does not compensate for a high score in any of the other two dimensions.

When it comes to structural factors, in particular, the maximum aggregation rule appears suitable for our purposes because even just one factor becoming weakened or corrupted may well disrupt the positive feedback loops that are necessary for a country to develop a more conducive environment for business. For example, the domestic structural factors depicted in Figure 9 below arguably all play an essential part in a "virtuous cycle" that promotes a country's resilience and tends to reduce its geopolitical risk exposure.

Fig. 9: ***Examples of virtuous cycle, favouring "good governance" and resilience***



This suggests that one and the same structural factor (a box in the Figure above) can affect several portions of the virtuous cycle. Also, if one (let alone several) of those structural factors are eliminated or weakened, the whole cycle may well suffer. Indeed, the very fact that several factors are necessary for a positive outcome, such as the virtuous cycle depicted above, means that the absence of even just one of them is sufficient for fostering the opposite outcome. This suggests that the substitutability logic is the correct one for assessing risk.

This "taking the maximum" aggregation rule is explained by social science methodologist Gary Goertz (Goertz, 2006, 2020), who refers to it as the "best shot" method of aggregation, corresponding to the logical "OR". This contrasts with what he calls "the weakest link" method, exemplified by the "AND" logical operator.

In addition to providing an overall country score, our model allows the user to also see how a country scores along each of the three main risk dimensions, separately. Therefore, the "taking the maximum" method of aggregation, while making the most sense for risk assessment purposes, does not prevent the user from checking the scores of the second- and third-highest dimensions. Figure 10 below shows the overall score assigned to four countries for a generic business. Figure 11 then shows the same data, but broken down by risk dimension.

Fig. 10: ***Geopolitical risk scores, overall (example)***

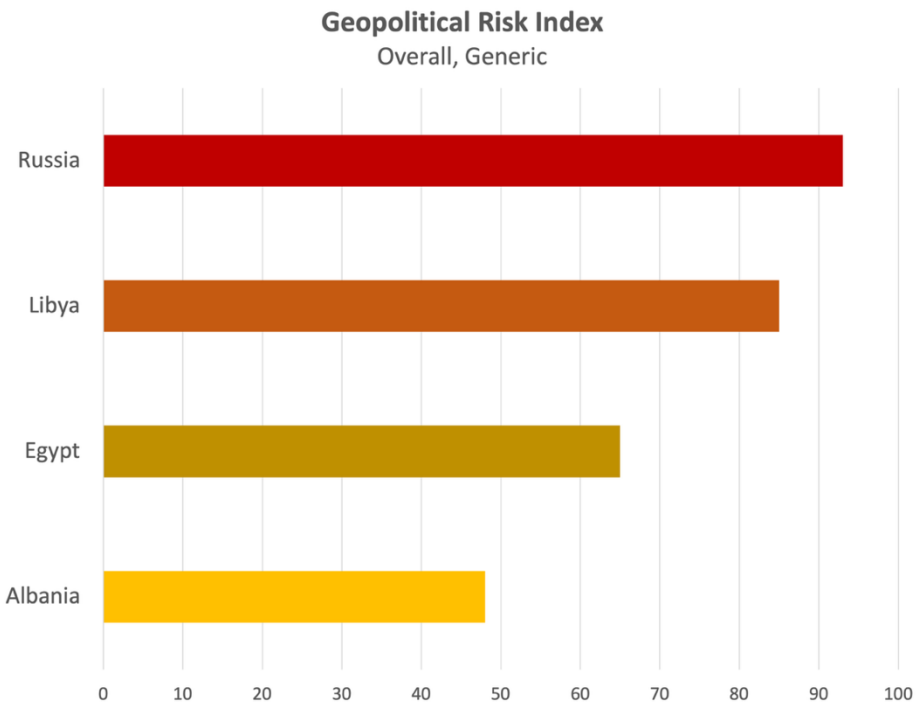
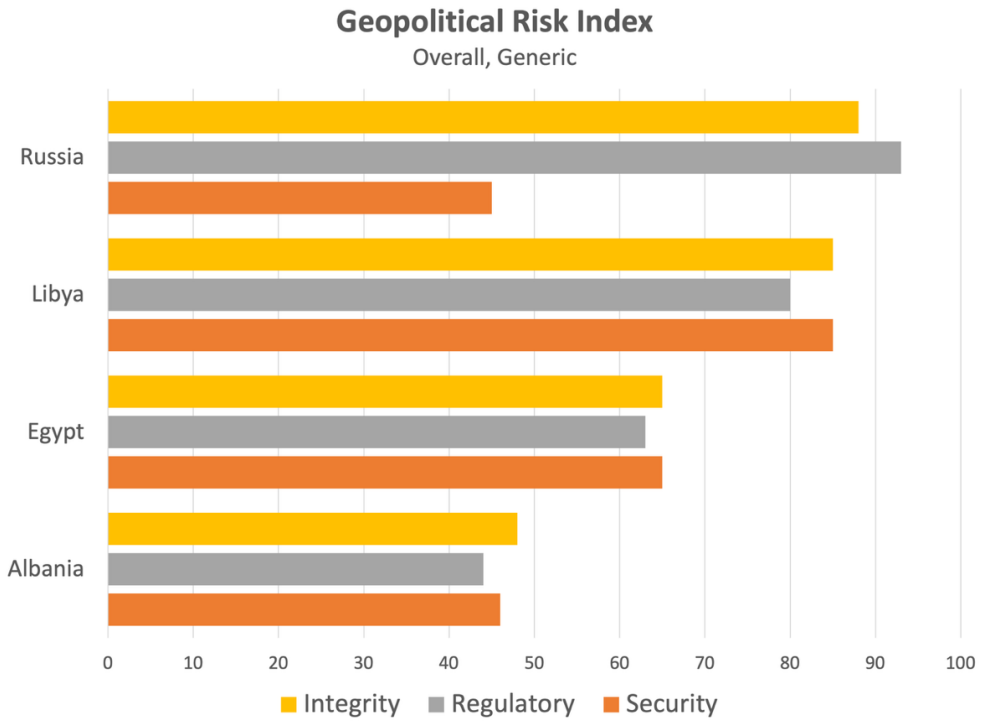


Fig. 11: ***Geopolitical risk scores broken down by risk dimensions (example)***



3.6 – Results

In this section, we display the geopolitical risk scores that our methodology has produced for 9 test countries. They refer to our analysis of the countries as of 28 May 2025, when this paper was being prepared for printing. Table 2 below summarizes the results for each country, industry and type of operations (trade vs FDI).

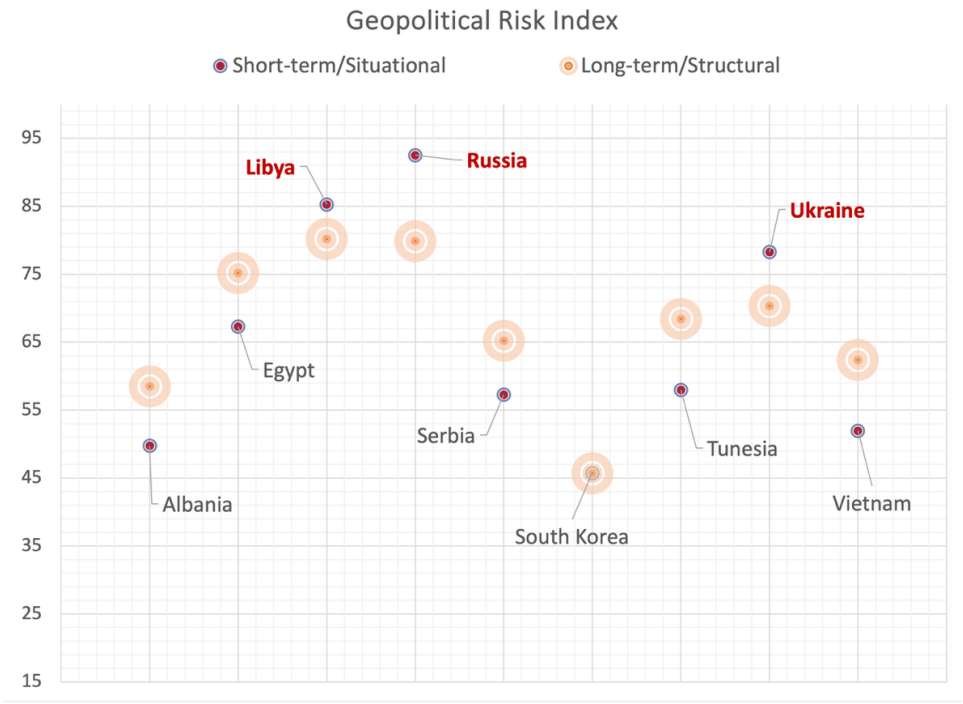
Table 2: ***Summary of data produced for 9 test countries***

	Overall Generic	Overall Trade	Overall FDI	Banking Trade	Banking FDI	Defence Trade	Defence FDI	Energy Trade	Energy FDI	Manuf. Trade	Manuf. FDI
Albania	**50**	47	53	43	50	41	57	46	55	47	57

Egypt	**67**	63	72	58	68	56	77	63	74	64	77
Libya	**85**	79	91	76	84	73	97	82	97	84	97
Russia	**93**	92	95	84	96	79	96	89	96	92	96
Serbia	**57**	54	61	49	58	47	65	53	63	54	65
S. Korea	**46**	43	49	41	46	39	52	44	51	45	52
Tunisia	**58**	55	62	49	58	47	66	53	64	54	66
Ukraine	**78**	71	83	70	76	66	89	75	89	76	89
Vietnam	**52**	52	55	46	55	43	59	48	57	50	59

Figure 12 below shows each country's geopolitical risk scores broken down into our two forward-looking causal layers: proximate factors ("short-term, situational" in the graph) and structural factors ("long-term, structural" in the graph). "Short term" here refers to an assessment horizon of 6-12 months from now, roughly. "Long term" refers to an assessment horizon of about 4-5 years. On the graph, the wider diameter of the long-term, structural estimates reflects the greater uncertainty attached to longer time spans. The data represented here refers to a generic business, without considering its industry or type of operations.

Fig. 12: ***Short term, situational risk assessment vs long term, structural risk propensity***



Countries that score higher in their short-term risk level compared to their long-term one (coloured in red on the graph) are currently going through situations of heightened risk compared to their long-term structural propensity. This could be for a variety of reasons, broadly to do with what we call "proximate factors", or the intent, capabilities and circumstances of relevant intentional actors. Such actors can be individual or collective, domestic or international.

Conversely, countries that score lower in their short-term risk level compared to their long-term one are benefiting from "benign" proximate factors, which are currently reducing the level of risk compared to the country's long-term propensity. Again, those factors depend on the intent, capabilities and circumstances of relevant actors. Behind our unified methodology, each country's situation is different. A key benefit of the index lies in alerting its users to the need for more detailed analysis on specific countries at a given time. GRO can certainly provide such in-depth analysis, which is beyond the scope of a global cross-country index.

Another possible angle from which to approach our results is to highlight the difference between the risk level attached to trade operations compared to direct investment – see Figure 13 below, with reference to a typical company in the manufacturing sector.

Fig. 13: ***Geopolitical risk for manufacturing companies, trade vs FDI***

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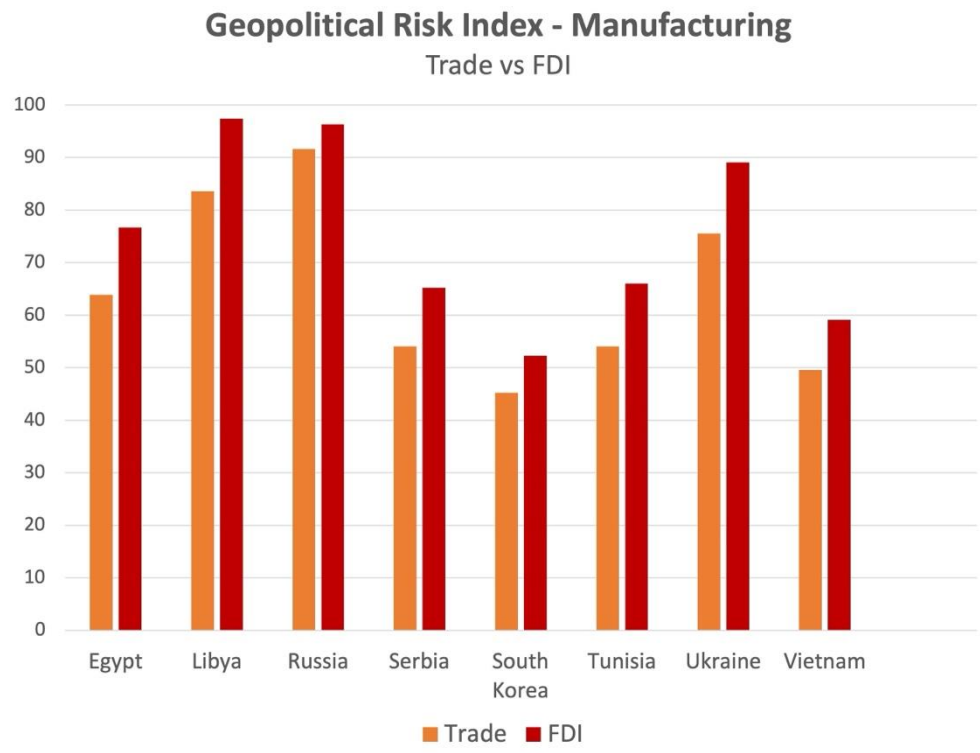
Geopolitical Risk Index - Manufacturing
Trade vs FDI
100
90
80
70
60
50
40
30
20
10
0
Egypt
Libya
Russia
Serbia
South Korea
Tunisia
Ukraine
Vietnam
Trade
FDI

4 – Conclusion

In a world increasingly shaped by geopolitical volatility, the ability to anticipate and respond to risk is no longer a luxury—it is a necessity. The proposed index represents a significant step forward in equipping Italian businesses with the tools they need to navigate this complex environment. By combining expert judgment with a structured, multi-layered model, the index offers a dynamic and differentiated assessment of geopolitical risk that is tailored to the specific needs of Italian enterprises across key industries.

The GRI captures the evolving nature of geopolitical threats through its integration of structural, proximate, and current risk factors. This approach allows for a more realistic and timely understanding of the challenges businesses may face, whether they are trading with or investing in foreign markets. Moreover, by disaggregating risk across three core dimensions—security, regulatory, and integrity—the index provides a nuanced view of how different types of threats may impact different aspects of business operations. The GRI is not intended to replace in-depth country analysis or sector-specific intelligence. Rather, it serves as a strategic compass—an early warning system that highlights where attention is most urgently needed. It enables decision-makers to prioritize resources, reassess exposure, and make informed choices in an increasingly uncertain global landscape. As the GRO continues to refine and expand the index, future iterations will incorporate new data, respond to emerging trends, and adapt to the evolving needs of its users.

Ultimately, the value of the GRI lies in its ability to bridge the gap between geopolitical analysis and business strategy. It translates complex global dynamics into actionable insights, empowering Italian companies to operate with greater foresight, resilience, and confidence. In doing so, it contributes not only to the competitiveness of individual firms, but to the broader strategic positioning of Italy in the global economy.

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