The background of the cover is a photograph of a city skyline at sunset. In the foreground, a suspension bridge with stone towers and cables spans a body of water. The city skyline in the background features several prominent skyscrapers, including the Freedom Tower on the left and the Willis Tower on the right. The sky is a mix of orange, yellow, and blue, indicating the time is either dawn or dusk. The overall mood is professional and global.

# THE DEFINITIVE GUIDE TO INTERNATIONAL BUSINESS EXPANSION

**MIRAZIZ KHIDOYATOV, ESQ.**

**Internauka Publishing House**

# **THE DEFINITIVE GUIDE TO INTERNATIONAL BUSINESS EXPANSION**



**By Miraziz Khidoyatov**

Version 1.0

Kyiv  
Internauka Publishing House  
2025

All rights reserved. All content, including text, diagrams, methodologies, and branding elements, is the exclusive property of Miraziz Khidoyatov. Unauthorized reproduction, distribution, or use is strictly prohibited. This manual and its contents are protected under U.S. and international copyright laws. Any use of this material must include proper attribution to Miraziz Khidoyatov, including the copyright notice: © 2025 Miraziz Khidoyatov. All rights reserved.

**DISCLAIMER:** The methodologies described herein (GIRA, EPI, SIAS, and the COMPASS framework) are proprietary to Miraziz Khidoyatov. The particular expression of these methodologies, as embodied in the text, structure, and diagrams herein, is subject to copyright protection under 17 U.S.C. § 102(a). This manual confers no license, express or implied, to reproduce, distribute, or create derivative works from its contents absent prior written permission from Miraziz Khidoyatov.

For permissions, contact Miraziz Khidoyatov at [miraziz.khidoyatov.esq@gmail.com](mailto:miraziz.khidoyatov.esq@gmail.com) or +1 (210) 787–9779. Unauthorized use constitutes infringement of copyright and may subject the infringer to civil and criminal penalties under applicable law, enforceable irrespective of registration status.

The COMPASS Logo™, COMPASS™, GIRA™, EPI™ and SIAS™ are trademarks of Miraziz Khidoyatov. Unauthorized use is prohibited. These trademarks are protected under U.S. and international trademark laws.

This manual has pending registration with the U.S. Copyright Office. Despite pending registration, this manual is already protected under U.S. copyright law pursuant to 17 U.S.C. § 102(a), which grants copyright protection automatically upon the creation of an original work fixed in a tangible medium of expression. Under 17 U.S.C. § 302(a), this protection begins at the moment of creation and endures for the life of the author plus 70 years. Additionally, the Berne Convention for the

Protection of Literary and Artistic Works ensures copyright enforcement in member countries worldwide without the need for formal registration. This manual complies with the Digital Millennium Copyright Act (DMCA), which prohibits the circumvention of technological measures protecting copyrighted works under 17 U.S.C. § 1201(a). Furthermore, the principles established in *Feist Publications, Inc. v. Rural Tel. Serv. Co.*, 499 U.S. 340 (1991), confirm that copyright protection extends to original expressions, such as the text, diagrams, and methodologies in this manual. It also aligns with applicable case law, including but not limited to *Oracle Am., Inc. v. Google Inc.*, which underscores the protection of creative works under copyright law.

This manual is protected by digital rights management (DRM) technologies and watermarks to prevent unauthorized copying or distribution. By using this manual, you agree to its terms. Violations may result in civil and criminal penalties under U.S. and international law. Governed by U.S. federal copyright and trademark laws. This manual is subject to periodic updates. Users are encouraged to refer to the latest version for the most accurate and up-to-date information. For the latest version of this manual, please contact Miraziz Khidoyatov

By using or accessing this manual, you agree to its terms. Violations may result in civil and criminal penalties under U.S. and international law. Miraziz Khidoyatov is not liable for any damages resulting from the unauthorized use or misuse of this manual. This manual and its contents are governed by the international and national intellectual property laws, including but not limited to the laws of Ukraine, Uzbekistan and the United States, including federal copyright and trademark laws.

# TABLE OF CONTENTS

<b>Abstract.....</b>	<b>6</b>
<b>Introduction.....</b>	<b>7</b>
<b>1. THEORETICAL–METHODOLOGICAL FOUNDATIONS .....</b>	<b>11</b>
1.1. Integrated approach: the COMPASS framework .....	12
1.1.1. GIRA: present risk evaluation .....	13
1.1.2. EPI: long-term market potential .....	14
1.1.3. SIAS: firm-specific strategic alignment .....	15
1.2. Legal, financial, and organizational underpinnings .....	16
1.2.1. Legal and compliance framework.....	16
1.2.2. Financial analysis and funding strategy .....	17
1.2.3. Organizational and managerial preparedness .....	18
1.3. Embedding ESG and sustainable development principles .....	18
<b>2. METHODOLOGY AND IMPLEMENTATION TOOLS .....</b>	<b>20</b>
2.1. The GIRA algorithm: procedural model .....	20
2.2. Calculating the Emerging Potential Index (EPI) .....	25
2.3. Constructing the Strategic Interest Alignment Score (SIAS) .....	30
2.4. Integrating GIRA, EPI, and SIAS: the COMPASS composite .....	31
2.5. Stress Test .....	34
2.6. The Vital Role of Local Expertise in Global Expansion.....	36
2.7. Legal and financial due diligence.....	37
2.8. ESG and ethical practices integration .....	38
2.9. Regional and sectoral specificity .....	39
<b>3. EMPIRICAL VALIDATION AND CASE APPLICATIONS.....</b>	<b>40</b>
3.1. Purpose of Case Application .....	41
3.2. Case Study: AgTech AI Startup Expansion.....	41
3.2.1. Company Profile and Strategic Context.....	41
3.2.2. Methodological Approach .....	42
3.2.3. GIRA: Present-Day Stability Assessment .....	42

3.2.4. EPI: Long-Term Growth Potential .....	43
3.2.5. SIAS: Strategic Interest Alignment.....	43
3.2.6. COMPASS Composite Score and Interpretation.....	43
3.2.7. Strategic Implications and Decision Guidance.....	44
3.3. Stress Testing the COMPASS Framework .....	47
3.3.1. Purpose of Stress Testing .....	48
3.3.2. Stress Test .....	48
3.3.3. Decision Guidance .....	52
3.4. Historical Case Studies: Lessons from Failed Expansions.....	52
3.5. Conclusion .....	55
<b>4. RESULTS AND DISCUSSION.....</b>	<b>57</b>
<b>Conclusion.....</b>	<b>59</b>
<b>References .....</b>	<b>60</b>
<b>Appendix A. GIRA Criteria .....</b>	<b>63</b>
<b>Appendix B. EPI Criteria.....</b>	<b>137</b>
<b>Appendix C. COMPASS Stress Test Worksheet .....</b>	<b>147</b>



## ABSTRACT

This work presents a comprehensive approach to international business expansion, the relevance of which is driven by growing globalization and the need to systematize companies' entry into international markets. The main goal is to develop methodological tools for effective planning and implementation of international expansion. Key aspects are included, such as the legal component covering compliance requirements, legal considerations for identifying and vetting partners, contract structuring, and intellectual property protection. An original framework, COMPASS, is proposed, which integrates the Global Instability Risk Algorithm (GIRA), Emerging Potential Index (EPI), and Strategic Interest Alignment Score (SIAS) to systematize the decision-making process for international market entry. GIRA assesses present-day risks, EPI evaluates long-term growth potential, and SIAS ensures alignment with firm-specific strategic goals. The methodology for assessing organizational readiness is described, including analysis of resource potential, cultural compatibility, and geopolitical risks. A set of practical tools has been developed for financial modeling, partner due diligence, and international operations management. Mechanisms for integrating sustainability principles and ethical practices into international expansion strategy are presented, including analysis of industry specifics and regional characteristics. As a result, a holistic system for managing the international expansion process has been formed, allowing to minimize risks and increase the effectiveness of entering new markets. The material is intended for company executives, international business consultants, and specialists in international management.

# INTRODUCTION

International business expansion has become a multifaceted process that requires companies to address not only financial opportunities but also diverse political, cultural, and regulatory contexts in target markets. Traditional approaches, such as the Eclectic Paradigm (often referred to as the OLI framework) and the Uppsala model, have laid groundwork for understanding why and how firms expand internationally [1, 2]. However, these models may not fully account for institutional volatility, particularly in emerging markets, necessitating the integration of contemporary risk-assessment tools [14]. Furthermore, rising global interdependencies, rapid technological changes, and evolving regulatory landscapes necessitate more integrated and data-driven methodologies for evaluating foreign markets. These developments underline the need for a robust framework that assesses immediate risks, long-term market potential, and alignment with firm-specific strategies before committing resources to cross-border ventures.

A growing body of scholarly and practical insights highlights the criticality of risk management and due diligence in internationalization. Firms increasingly face a “liability of foreignness,” contending with institutional differences, untested legal systems, and unfamiliar political environments,, which can be exacerbated by cultural misalignments leading to increased operational costs [3, 15]. Compliance issues, along with the pressure to adopt sustainable and ethically responsible practices, complicate the expansion process further. To navigate this complexity, some organizations now employ multi-dimensional models that incorporate quantitative risk scores, forward- looking economic indicators, and internal strategic priorities, echoing calls for hybrid models that integrate macroeconomic metrics with firm-specific strategic considerations [4, 5, 16]. The urgency to minimize failure rates, protect reputations, and ensure favorable returns has galvanized interest in frameworks that can unify these considerations.



Although numerous models address elements of international expansion — such as political risk assessment, macroeconomic analysis, or cultural adaptation — few offer a cohesive methodology that systematically integrates present-day risk, emerging potential, and company-specific strategic goals. Traditional methods (e.g., PESTEL or country risk indices) provide high-level snapshots of external conditions but often lack mechanisms to incorporate firm-specific priorities or the potential for long-term structural growth. In developing nations, where chronic shortages historically drove populations to queue for hours for basic groceries or wait years for cars, as seen in the USSR, this immense untapped potential creates vast demand that businesses can uniquely satisfy as first or sole providers, market opportunity traditional frameworks frequently overlook (see, e.g. Image 1 for lines for McDonald’s in Moscow in 1990’s and lines in Tashkent (Uzbekistan) for KFC in 2018). Conversely, purely strategic or financial frameworks may overlook broader socioeconomic and regulatory variables. This methodological gap can result in suboptimal market choices or failure to anticipate critical hurdles, including legal compliance or socio-political unrest, particularly given the risks of “regulatory whiplash” and the potential for rapid regulatory changes [6, 17].

The overarching goal of this research is to develop and articulate a methodology for international expansion that synthesizes risk evaluation, future-oriented market analysis, and strategic alignment. Specifically, this study aims to:

1. Present a structured approach — rooted in academic theory and practical insights — that guides decision-makers from initial risk assessment to final market selection and operational planning.
2. Integrate the COMPASS framework, particularly its three core components (GIRA, EPI, and SIAS), into a broader method that also encompasses legal compliance, financial planning, organizational preparedness, and sustainability considerations.
3. Provide empirical and theoretical underpinnings to validate why such a composite method can mitigate expansion risks and potentially enhance long-term market performance.

To fulfill these objectives, the research addresses the following key questions:

- How can multiple dimensions of international expansion (political risk, economic growth potential, strategic alignment, and sustainability) be incorporated into a single cohesive framework?
- What best practices in legal, financial, and organizational assessments can be systematically integrated into this methodology?



Image 1.

**Top:** Queue for KFC opening in Tashkent, Uzbekistan, in 2018.

**Bottom:** Line for opening of McDonald's in Soviet Moscow in 1990 [25, 26]

- To what extent does embedding Environmental, Social, and Governance (ESG) principles influence both risk mitigation and value creation in foreign markets?

From a theoretical standpoint, this study contributes to international business literature by offering a synthesized approach that merges established theoretical frameworks (e.g., OLI, Uppsala) with modern risk algorithms (e.g., GIRA) and forward-looking indices (e.g., EPI). For practitioners, the proposed methodology functions as a comprehensive guide. It provides a platform for quantitative risk measurement, helps identify strategic fits, and highlights compliance and sustainability imperatives. By bridging academic concepts and practical tools, the work aspires to serve both scholars seeking innovative research directions and corporate leaders aiming to reduce expansion uncertainties and achieve durable global footprints.

# 1. THEORETICAL–METHODOLOGICAL FOUNDATIONS

Academic literature on international business expansion highlights foundational models that explain why firms venture abroad and how they approach foreign markets. The Eclectic Paradigm, formulated by John Dunning, proposes that Ownership advantages (O), Location advantages (L), and Internalization benefits (I) collectively determine where and how firms invest internationally [1]. This perspective underscores factors such as firm-specific competencies, country-specific resources, and the strategic benefits of controlling operations rather than licensing them out. Critics of the OLI framework note, however, that it may underrepresent dynamic considerations like political fragility or shifts in consumer technology, particularly given that economic diversification and inequality are critical predictors of market stability [18].

Building on incremental learning, the Uppsala model suggests that firms gradually increase their commitment to foreign markets as they acquire experiential knowledge [2]. While this staged approach can help companies mitigate risk, contemporary scholarship points to “born-global” enterprises that internationalize rapidly, driven by digital platforms and global networks. Such firms bypass traditional stepwise processes, leveraging niche expertise and e-commerce channels to enter multiple national markets at once. Empirical analyses show that these agile expansions succeed when underpinned by robust knowledge exchange and risk tolerance, highlighting how digital platforms enable firms to bypass traditional internationalization stages [19].

Within these classical frameworks, risk assessment is often relegated to high-level macro analyses — like evaluating political stability or economic indicators— without offering refined tools for corporate managers to weigh one potential market against another in detail [7, 8]. Equally, compliance and organizational dimensions are insufficiently addressed, limiting the completeness

of traditional models when compared to today's complex regulatory and global contexts. Consequently, modern methodologies build on classical theories but incorporate structured algorithms and strategic alignment indices to address gaps in assessing daily operational realities, long-term developments, and firm-specific priorities.

### 1.1. Integrated approach: the COMPASS framework

In response to these limitations, recent scholarship and practice have converged on more comprehensive tools. One such

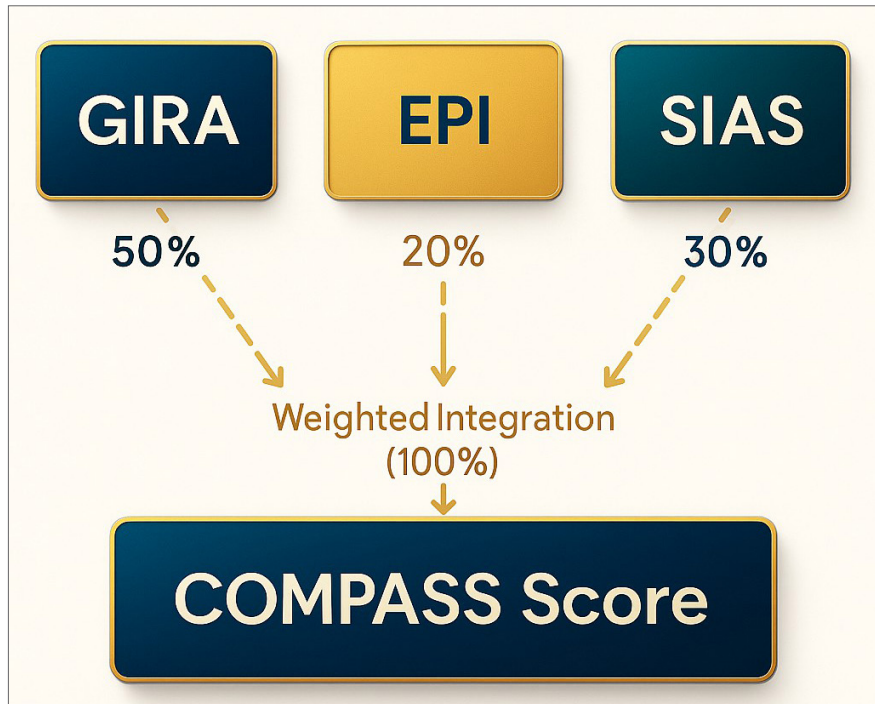


Figure 1. Conceptual integration of GIRA, EPI, and SIAS in the COMPASS framework

synthesis is the Comprehensive Objective Market Potential, Alignment, and Stability Synthesis (COMPASS) framework, which integrates multiple lenses into a single, data-driven system. COMPASS is anchored by three distinct components:

- **Global Instability Risk Algorithm (GIRA):** Provides a numerical gauge of a nation’s current stability, factoring political, economic, social, and additional categories.
- **Emerging Potential Index (EPI):** Quantifies the long-term growth capacity of a country, looking beyond immediate economic conditions to structural drivers such as resource endowment, demographic profile, and innovation potential.
- **Strategic Interest Alignment Score (SIAS):** Reflects how effectively a foreign market’s characteristics align with the specific strategic objectives and capabilities of an individual firm.

Figure 1 (conceptual diagram) shows how GIRA, EPI, and SIAS integrate into the COMPASS composite score, weighting present risks, future potential, and company-specific fit.

### ***1.1.1. GIRA: present risk evaluation***

The Global Instability Risk Algorithm (GIRA) offers a systematic assessment of current country risks. Drawing on a wide array of quantitative and qualitative inputs, GIRA aggregates data across multiple dimensions, typically including:

- Political factors such as government effectiveness, legitimacy, corruption, and rule of law.
- Economic indicators including GDP growth, diversification, income inequality, and ease of doing business.
- Social and demographic aspects covering health, education, cultural cohesion, and potential ethnic tensions.
- Security measures (terrorism threats, conflict prevalence, effectiveness of security forces).
- Environmental vulnerabilities (exposure to natural disasters, resource scarcity), which can significantly impact supply chain stability [21].



- Technological readiness (infrastructure, digital adoption).
- Information factors (media freedom, misinformation risks).

Each category is weighted, and sub-scores are combined to produce a final value from 1 to 100, enabling managers to see at a glance where a particular country lies on a stability–instability, drawing from data sources such as the World Bank’s Worldwide Governance Indicators [20]. Firms can tailor certain scoring nuances to reflect their own risk appetite — though GIRA’s standardized criteria maintain consistent comparability. By focusing on the immediate operating environment, GIRA addresses the fundamental question: “Is the present environment safe and conducive for investment?”

### ***1.1.2. EPI: long-term market potential***

The Emerging Potential Index (EPI) shifts the analytic lens forward, estimating a country’s capacity for future economic and social development. Its theoretical underpinnings rest on development economics, in which “catch-up” growth or latent capacity can be as important as current GDP levels. EPI’s objective formula includes factors such as:

- Natural resource endowment (energy, minerals).
- Population scale and dynamics (youth bulge, demographic trends).
- Strategic geography (trade routes, proximity to major economic blocs).
- Innovation and entrepreneurship (Digital adoption, business creation, innovation capacity).
- Present development level (D) to adjust for baseline disparities, acknowledging the potential for untapped human capital and technological leapfrogging in emerging markets [22].

By using publicly available data sources and fixed weighting, EPI remains largely free of subjective bias, especially considering the correlation between youth bulges and future economic productivity with adequate education investments [23]. This dimension

is especially relevant for companies adopting a long-term horizon, as it highlights markets that could surge economically once governance improves or investments increase, even if current conditions seem modest. In practical terms, EPI mitigates the pitfall of focusing solely on immediate returns, prompting managers to evaluate whether a country’s structural fundamentals suggest compelling prospects over time.

### ***1.1.3. SIAS: firm-specific strategic alignment***

The Strategic Interest Alignment Score (SIAS) captures each organization’s unique priorities. In contrast to GIRA and EPI, which rely on more standardized indicators, SIAS is inherently subjective by design. Companies weigh criteria — for example, regulatory transparency, market demand for the firm’s products, workforce capabilities, or cultural compatibility — according to their own goals, views and biases. The result is a 1–100 score that pinpoints how well a nation aligns with a particular firm’s objectives and operational model. And even if scores would be substantially affected by SIAS skew (one way or the other) — this is still COMPASS’ design, as whenever a human or a company does not feel positive about an action, it is more advisable to either decide not to take on the action temporarily or permanently.

SIAS ensures that a high GIRA or EPI alone is insufficient if the country does not match the company’s core competencies, brand positioning, or resource needs. For instance, a global healthcare conglomerate might place heavy emphasis on the local healthcare system’s maturity and IP protection, whereas a renewable energy firm could focus on environmental regulation support and stable energy policies. Through SIAS, managers incorporate these individualized elements into the overall expansion decision, preventing reliance on “one-size-fits-all” country risk or growth indices.

The COMPASS framework consolidates these three components into a single composite score, typically with GIRA weighted at 50%, EPI at 20%, and SIAS at 30%. These weights are based on

the relative importance of each component in evaluating market suitability. GIRA's 50% weighting reflects the critical role of current stability, as unstable conditions can undermine any expansion effort. SIAS, at 30%, ensures the market aligns with the firm's strategic objectives, a key factor in operational success. EPI's 20% accounts for long-term growth potential, which is secondary to immediate viability. These proportions are derived from analysis of historical market entries and provide a balanced framework for decision-making. This weighting also reflects the primacy of current stability, tempered by forward-looking potential, and finalized by strategic fit. The final COMPASS score enables companies to rank potential target countries and develop a shortlist for deeper investigation. A market with strong EPI but poor GIRA might still be considered if the firm is highly risk-tolerant and sees a compelling strategic fit, whereas a market with moderate EPI but strong GIRA and high SIAS might be more appealing for risk-averse or brand-sensitive companies. By blending quantitative and qualitative insights, COMPASS provides a balanced perspective, ensuring that managers consider both near-term viability and prospective opportunities within the context of their corporate strategy.

## **1.2. Legal, financial, and organizational underpinnings**

While COMPASS lays the foundation for market selection, successful expansion also relies on thorough legal, financial, and organizational preparedness. These dimensions are vital in turning theoretical market evaluations into viable operational strategies.

### ***1.2.1. Legal and compliance framework***

Navigating foreign legal regimes is often the first major hurdle in internationalization. Researchers have long emphasized

the importance of institutional theory, which notes that divergent rules, regulations, and norms significantly affect expansion outcomes, emphasizing that institutions are the “rules of the game” shaping economic behavior [3, 24]. Firms must evaluate business formation requirements, restrictions on foreign ownership, and sector-specific mandates to ensure legitimate market entry. Beyond set-up formalities, continuous compliance is critical. Host countries can quickly alter investment rules or impose new taxes, posing “regulatory whiplash” risks for unprepared entrants. Additionally, anti-corruption standards (e.g., FCPA) mandate stringent internal controls, necessitating audits and training to prevent legal breaches [5, 9]. Accordingly, best practice dictates that companies engage local legal experts early, secure intellectual property protections in the target market, and implement robust compliance oversight to preserve legitimacy and mitigate regulatory threats.

### ***1.2.2. Financial analysis and funding strategy***

Global expansion incurs substantial costs, from one-time set-up expenses to ongoing operational outlays. Financial feasibility studies should model various revenue scenarios alongside potential macroeconomic shocks, such as currency fluctuations or commodity price changes. Cost-of-capital analyses can guide whether to pursue local funding or rely on the parent company’s retained earnings. Hedging strategies may be essential if currency volatility is expected, while political risk insurance can protect against expropriation or major disruptions. Ultimately, prudent capital structure decisions — such as forming joint ventures to distribute risk or applying for special economic zone benefits — help ensure that a new operation remains financially resilient. Frequent financial audits and strict internal controls further safeguard against fraud, especially in markets with limited transparency or higher corruption indices [5, 6, 9].

### **1.2.3. Organizational and managerial preparedness**

Organizational alignment is central to operationalizing any market entry strategy. Scholars note that expansions often fail when internal processes, talent, and structure fail to adapt to new contexts. A best practice involves creating a dedicated cross-functional task force that coordinates between corporate headquarters and local operations, ensuring strategic consistency as well as responsiveness to local conditions. Managerial expertise — particularly in cross-cultural communication — can ease integration and facilitate knowledge transfer. Hiring local talent and combining them with seasoned expatriates fosters a dual advantage, merging local know-how with the firm's global standards. Further, the selection of an organizational structure— subsidiary, branch, or joint venture — shapes reporting lines and accountability. Clear governance procedures (e.g., formal oversight committees, regular performance reviews) stabilize the expansion during its early phases, limiting confusion and building trust [6, 9].

## **1.3. Embedding ESG and sustainable development principles**

Contemporary international business expansions increasingly intersect with Environmental, Social, and Governance (ESG) considerations, reflecting a global shift toward sustainable and responsible enterprise. Research suggests that corporations incorporating ESG targets frequently experience advantages in brand reputation, risk management, and investor appeal [5, 6, 10]. Strategically, many companies aim to align local operations with environmental goals, whether by adopting renewable energy sources or committing to waste reduction in new markets. Social engagement, such as local community development or fair labor practices, can reinforce a foreign subsidiary's social license to operate. Meanwhile, robust governance mechanisms safeguard the company from unethical

behaviors, particularly in regions where transparency may be limited. Best practices recommend that ESG frameworks be integrated into early decision-making. A firm might, for instance, consider a country's environmental regulations as part of SIAS if sustainability is a core strategic objective. Alternatively, it can incorporate ESG measures directly into GIRA or EPI weighting where relevant, ensuring that each potential market is viewed through the lens of long-term ethical compliance and community impact [5, 6, 10].

Ongoing discussions in international business scholarship frequently revolve around several key tensions. One concerns the incremental vs. rapid expansion debate [2, 11]: whether a cautious, stepwise approach is more prudent or whether digital globalization now empowers faster multi-market entry. Another debate highlights quantitative vs. managerial heuristics. While frameworks like COMPASS rely on systematic scoring, executives often use personal experience or relationships to identify promising markets. A balanced approach that harnesses both data and managerial insight appears most robust. Additionally, standardization vs. adaptation remains a classic question in global strategy, with “glocalization” increasingly favored as companies seek to blend global brand identity with local market tailoring [9, 12, 13]. Empirical research also confirms the growing impact of digital platforms in market entry, especially for startups that initially test foreign demand online rather than establishing an immediate physical presence. Finally, there is mounting evidence that high ESG performance can bolster both financial returns and stakeholder acceptance, suggesting that integrative approaches are not merely philanthropic gestures but strategic differentiators.

Taken together, these debates reinforce the importance of adopting a comprehensive, flexible methodology for international expansion. Academic and practitioner insights reveal that structured analytical models should be supplemented by on-the-ground knowledge, cultural competence, and a commitment to ethical practices. The synergy of such factors defines modern, frameworks that aim to reduce the likelihood of abrupt exits or unintended harm while maximizing long-term organizational success in global markets.



## 2. METHODOLOGY AND IMPLEMENTATION TOOLS

This section outlines a practical methodology for guiding international business expansion. Building on the theoretical foundation of the COMPASS framework — encompassing GIRA, EPI, and SIAS — this portion describes specific procedures, data requirements, and decision-making instruments that operationalize the approach. It also incorporates broader considerations such as organizational readiness, legal and financial due diligence, ESG practices, and sectoral/regional adaptations.

### 2.1. The GIRA algorithm: procedural model

The Global Instability Risk Algorithm (GIRA) is a structured tool for evaluating present-day risks in candidate countries. It aggregates multiple factors — political, economic, social, security, environmental, informational, technological, and demographic — into a single stability score (1–100). Each category contributes to the GIRA score according to its assigned weight, reflecting its impact on overall stability: Political Factors (25%), Economic Factors (20%), Social Factors (20%), Security Factors (15%), Environmental Factors (5%), Information Factors (5%), Technological Factors (5%), and Demographic Factors (5%). These weights, summing to 100%, prioritize political and economic stability as foundational drivers, while still accounting for secondary influences such as environmental and technological conditions. This helps managers compare how conducive a particular market is to investment, indicating whether risk mitigation strategies or additional caution are necessary.

#### *Step 1: data collection and verification*

1. Sources of Information: GIRA relies on data from reputable international organizations (e.g., the World Bank, the United

Nations, Transparency International), along with local statistical agencies and expert analyses.

2. Cross-Checking: Because different institutions may report slightly divergent figures — for instance, variations in GDP growth or corruption perceptions— cross-verification is recommended. Identifying and reconciling inconsistencies through multiple sources ensures robust input data. To mitigate overreliance on high-quality data, particularly in data-scarce markets, the GIRA Criteria (Appendix A) provide detailed qualitative guidelines for scoring each factor (e.g., government effectiveness, corruption levels). These criteria enable reliable assessments when quantitative data is incomplete or outdated, ensuring COMPASS’s applicability across diverse contexts, from stable economies to frontier markets.

*Table 1*

**Illustrative GIRA data collection matrix**

<b>Factor</b>	<b>Primary source</b>	<b>Secondary source</b>	<b>Preliminary score</b>	<b>Reviewer comments</b>
Government effectiveness	World Bank Governance Indicators	Local Expert Survey	–	Need updated data post-election
Corruption levels	Transparency International Index	NGO & Media Reports	–	Contradictory findings in rural areas
GDP growth	IMF World Economic Outlook	National Statistics Office	–	Last quarter shows downturn
Social cohesion (ethnic tensions)	UN Development Programme	Local University Research	–	Urban centers mostly stable
Ease of doing business	World Bank Doing Business	Regional Chamber of Commerce	–	Emerging reforms in licensing process

3. Frequency of Updates: GIRA outputs can shift if political regimes change or new economic statistics emerge. A best practice is to refresh the data at least semi-annually, especially for markets prone to rapid policy shifts.

In Table 1, an example GIRA data-collection matrix is shown. Each row represents a factor (e.g., government effectiveness, corruption level, GDP growth, etc.), and the columns track data sources, provisional ratings, and reviewer comments.

### ***Step 2: assigning scores to factors***

Once data are compiled, each factor within GIRA's broad categories — political, economic, social, security, environmental, informational, technological, and demographic — is assigned a numeric score from 1 to 100, according to the GIRA Criteria guidelines ([7], Appendix 1). For instance:

- **Political Factors:** Government effectiveness, corruption levels, state legitimacy, rule of law, and participation in geopolitical blocs receive discrete sub-scores.
- **Economic Factors:** Metrics such as economic performance, diversification, income inequality, unemployment rates, and ease of doing business are evaluated.
- **Social Factors:** Education, health, ethnic/cultural cohesion, historical stability.
- **Security Factors:** Conflict prevalence, terrorism risk, security apparatus effectiveness.
- **Environmental Factors:** Climate vulnerability, disaster readiness.
- **Information Factors:** Media freedom, misinformation levels.
- **Technological Factors:** Infrastructure readiness, digital access.
- **Demographic Factors:** Population growth, urbanization patterns.

Each sub-score is justified using references like the Transparency International (TI) Index, the World Bank Ease of Doing Business ranking, or local socio-political reports. Organizations with higher risk tolerance might subjectively nudge sub-scores

upward for moderate risk factors, whereas conservative firms might err on the lower side within the allowed scoring band. To maintain reliability despite subjective adjustments, GIRA incorporates the following safeguards:

- **Narrow Criteria Definitions:** Each score band is anchored to specific qualitative and quantitative criteria (e.g., a security score of 70 requires ‘low crime rates’ and ‘no active conflicts’).
- **Structured Scoring Framework:** Evaluators must use verified data sources (e.g., UN reports, IMF statistics) and adhere to a standardized methodology.
- **Predictable Variability:** Subjective adjustments are capped within predefined bands (e.g.,  $\pm 9$  points), aligning with organizational risk tolerance while preserving comparability.

These mechanisms ensure that GIRA scores remain consistent and defensible across users and contexts, as the GIRA framework requires consistent reference to explicit numeric boundaries in the Appendix 1 to avoid undue bias.

### ***Step 3: calculating the GIRA index (1–100)***

After each factor receives a numeric rating, sub-scores are averaged by category and then multiplied by assigned weights (e.g., 25% for political, 20% for economic, 20% for social, 15% for security, 5% each for environmental, information, technological, and demographic). A simplified version of the formula is:

$$GIRA\ Score = \left( \sum_{c=1}^C \left[ \frac{1}{n_c} \sum_{i=1}^{n_c} Factor\ Score_{i,c} \right] \times w_c \right)$$

where  $n_c$  is the number of factors in category  $c$  and  $w_c$  is the category’s weight.

This yields a final GIRA score from 1 to 100, interpreted as follows:

- **90–100: Very Stable** — Minimal risk, ideal for immediate investment.

- **70–89: Stable** — Low to moderate risk, suitable for expansion with standard monitoring.
- **50–69: Moderate Stability** — Balanced risk, requires targeted mitigation strategies.
- **30–49: Unstable** — High risk, demands extensive analysis and contingency plans.
- **1–29: Very Unstable** — Severe risk, typically advises against entry.

These thresholds provide a clear framework for translating GIRA scores into strategic decisions.

#### ***Step 4: Interpreting Results and Mitigation Strategies***

A GIRA score below 50 indicates significant market instability, suggesting either avoidance or robust contingency plans (e.g., political risk insurance, partnership with a local ally, or smaller-scale entry). Markets scoring 70 and above are generally deemed sufficiently stable for standard expansion. Where a market shows moderate or borderline stability, managers may proceed but with heightened caution, implementing deeper due diligence, stronger compliance structures, or a more gradual ramp-up. GIRA thus guides the baseline “go/no-go” decision and helps shape risk-management measures in each prospective country.

For enhanced cross-country comparison, GIRA scores can be normalized using a curve grading methodology:

1. Determine the highest GIRA score among evaluated countries ( $G_{\max}$ ).
2. Compute the adjustment factor:  $100 - G_{\max}$ .
3. Add this factor to each country’s GIRA score to produce a normalized value. For instance, if  $G_{\max}$  is 90, the adjustment factor is 10; a country scoring 82 would normalize to 92, with the top performer scaled to 100. This approach clarifies relative stability differences, particularly in high-scoring regions.

## 2.2. Calculating the Emerging Potential Index (EPI)

The Emerging Potential Index (EPI) captures a country's future-oriented capacity for growth, focusing on structural strengths that are not always reflected in current performance. It is an objective measure grounded in standardized global statistics, excluding subjective adjustments to ensure reproducibility.

The EPI comprises four structural factors plus a development measure D:

**1. Natural Resource Wealth (NRW):** Per-capita value of exploitable resources (energy, minerals, agricultural potential).

- **Data Source Examples:** World Bank's Comprehensive Wealth of Nations dataset, UN Comtrade, and BP Statistical Review of World Energy.

**2. Population Scale (PS):** Total population, youth bulge, and demographic profile.

- **Data Source Example:** UN Population Division data.

**3. Strategic Geographic Position (SGP):** Proximity to key trade routes, logistical performance, regional connectivity.

- **Data Source Examples:** World Bank Logistics Performance Index, Global Connectivity Indices, and geospatial data on proximity to major trade blocs.

**4. Innovation and Entrepreneurship (IE):** This measures a country's digital readiness and entrepreneurial activity, combining Digital Adoption (DA) and Entrepreneurship (ENT) with a 60/40 weighting respectively.

- **Digital Adoption (DA):** This shows how much people use digital tools like the internet and mobile phones, based on the Network Readiness Index (NRI) score from the Portulans Institute's latest report.
  - **Data Source:** NRI score from the Portulans Institute (use as is, as it is scored 0–100 anyway).
- **Entrepreneurship (ENT):** This measures entrepreneurship by combining the rate of new startups (NBD rate from the **World Bank**) and the quality of the startup environment (GII score



from **World Intellectual Property Organization (WIPO)**). The NBD rate is scaled to 0–100 using global minimum and maximum NBD rates, then averaged with the GII score.

■ Formula

$$ENT = \frac{\left( \frac{NBDrate - MinNBD}{MaxNBD - MinNBD} \times 100 \right) + GII\ Score}{2}$$

- **Proxy Metric for Missing NBD:** If a country's New Business Density (NBD) score is unavailable, calculate a proxy metric using data like new business applications or formations from national statistics (e.g., US Census Bureau's Business Formation Statistics). Adjust this by dividing the number of new registrations by the working-age population (ages 15–64) and multiplying by 1,000. For instance, if there are 1.4 million new business applications and a working-age population of 200 million, the proxy NBD is:

$$\left( \frac{1,400,000}{200,000,000} \right) \times 1,000 = 7.0$$

Each factor is scored on a 0–100 scale based on global percentile rankings. For instance, the top 1% of countries in patent filings per capita may score near 100 on IE, while those near the bottom rank approach zero.

EPI aggregates the factor scores using empirically derived weights. Let

$\alpha_{NRW}$ ,  $\alpha_{PS}$ ,  $\alpha_{SGP}$ ,  $\alpha_{IE}$  be fixed coefficients set by a neutral standards committee, and let D represent the development-adjustment factor (some approaches treat it as a negative exponent or a separate dimension).

$$\alpha_{NRW} + \alpha_{PS} + \alpha_{SGP} + \alpha_{IE} = 1$$

For instance:

$$\alpha_{NRW} = 0.30, \alpha_{PS} = 0.30, \alpha_{SGP} = 0.20, \alpha_{IE} = 0.20$$

The development-adjustment factor, **D**, represents a country's current advancement, drawing from three standardized metrics:

- **GDP per Capita Score (GCS)**: Using IMF or World Bank PPP-adjusted GDP per capita. Countries are ranked by GCS from 0–100.
  - **Scaling**: GCS will be calculated using a logarithmic scale between a global minimum GDP per capita and a global maximum GDP per capita, as this reflects the distribution of GDP per capita:

$$GCS = \frac{\ln(\text{GDP per capita of target country}) - \ln(\text{lowest GDP per capita})}{\ln(\text{highest GDP per capita}) - \ln(\text{lowest GDP per capita})} \times 100$$

- **Human Development Score (HDS)**: Directly derived from the UNDP's Human Development Index (HDI). The HDI, normally 0–1, is scaled linearly to 0–100.
  - **Scaling**:  $HDS = HDI \times 100$
- **Infrastructure Score (IFS)**: From standardized global indices (e.g., WEF Global Competitiveness Reports, International Telecommunication Union data). Countries are ranked and mapped to 0–100.

### Formula for **D**:

$$D = 0.4 \times GCS + 0.3 \times HDS + 0.3 \times IFS$$

The Development Level (**D**) metric captures both immediate economic capacity and the structural enablers of long-term growth by combining GDP per Capita Score (GCS), Human Development Score (HDS), and Infrastructure Score (IFS) in a 40/30/30 distribution. GCS, weighted at 0.4, reflects immediate purchasing power and revenue potential — signals that an economy can sustain robust commercial activity in the short term. HDS and IFS, each weighted at 0.3, address longer-horizon fundamentals: a nation's collective well-being, adaptability, and innovative capabilities (HDS), as well as the physical and digital networks (IFS) crucial for reliable production and distribution. This balance hews to recognized industry practices, acknowledging that a strong GDP per Capita often drives initial interest in a market, while durable

human capital and infrastructure shore up resilience and competitive advantage over time.

With the structural factors and the Development Level defined, we now turn to the Potential Score ( $P$ ), which quantifies a country's inherent capacity for future growth. Unlike  $D$ , which measures current achievement,  $P$  is forward-looking, aggregating the four structural factors — Natural Resource Wealth (NRW), Population Scale (PS), Strategic Geographic Position (SGP), and Innovation and Entrepreneurship (IE) — to assess the raw potential embedded in a country's resources, demographics, location, and innovative dynamism. Each factor, scored on a 0–100 scale based on global percentile rankings, contributes to  $P$  through a weighted sum, reflecting its relative importance to growth potential.

### **Defining the Potential Score (P)**

The Potential Score ( $P$ ) is calculated as:

$$P = (\alpha_{NRW} \times NRW) + (\alpha_{PS} \times PS) + (\alpha_{SGP} \times SGP) + (\alpha_{IE} \times IE)$$

where:

- $\alpha_{NRW} + \alpha_{PS} + \alpha_{SGP} + \alpha_{IE} = 1$
- Example weights, as set by the standards committee, might be:

$$\alpha_{NRW} = 0.30, \alpha_{PS} = 0.30, \alpha_{SGP} = 0.20, \alpha_{IE} = 0.20$$

These weights prioritize factors like natural resources and population scale (each at 0.30) as foundational drivers of potential, while strategic geography and innovation (0.20 each) enhance a country's ability to leverage those assets. The resulting  $P$  score, ranging from 0 to 100, represents the maximum growth potential a country could achieve based on its structural strengths, independent of its current development.

### **Combining P and D into the Emerging Potential Index (EPI)**

The Emerging Potential Index (EPI) integrates the Potential Score ( $P$ ) with the Development Level ( $D$ ) to provide a balanced measure of a country's growth prospects. While  $P$  highlights

structural advantages,  $D$  indicates how much of that potential has already been realized. The  $EPI$  adjusts  $P$  based on  $D$ , recognizing that less developed countries (with lower  $D$  scores) have more untapped potential, whereas highly developed countries (with higher  $D$  scores) may face diminishing returns on their structural strengths.

The EPI is calculated using the following formula:

$$EPI = P \times \left( 1 + \frac{100 - D}{100} \right).$$

Here is how it works:

- $P$  sets the ceiling of potential, based on structural factors.
- The term  $(1 + (100 - D)/100)$  reflects how much of that potential remains untapped:
  - If  $D = 0$  (minimal development), the factor is 2 and EPI equals  $2P$  — full potential remains untapped.
  - If  $D = 100$  (maximum development), the factor is 1 and EPI equals  $P$ .
  - The linear scale reflects that countries with lower development may offer greater catch-up growth, magnifying their latent potential.

The linear scale reflects that countries with lower development may offer greater catch-up growth, magnifying their latent potential. This formula scales  $P$  by a factor that decreases linearly as  $D$  increases, capturing the idea that countries with lower development levels have more room for rapid growth, while those with higher development may have less potential left to unlock.

This formula also ensures the EPI captures the interplay between a country's structural promise and its current reality, prioritizing nations with strong fundamentals and significant scope for advancement.

Markets with  $EPI \geq 70$  indicate strong latent catalysts for growth: large or young populations, resource availability, or a dynamic entrepreneurial climate. An EPI in the 40–69 range suggests partial strengths that may require policy reform or targeted investment, while  $<40$  denotes limited upside. For companies adopting a patient investment model (e.g., infrastructure, energy,

or technology firms), a high EPI can counterbalance moderate immediate challenges if leadership believes in future market maturation. However, if GIRA is too low, even strong future potential might be offset by unacceptable present-day risks.

### **2.3. Constructing the Strategic Interest Alignment Score (SIAS)**

While GIRA and EPI rely on standardized metrics, the Strategic Interest Alignment Score (SIAS) is firm-specific and deliberately subjective. It measures how well a given market matches a company's unique goals, capabilities, and operating preferences.

Before calculating SIAS, management teams define factors critical to success in a foreign market. These might include:

- **Regulatory Alignment:** Ease of licensing, IP protection, environmental or labor regulations.
- **Workforce Availability:** Existence of skilled labor or robust talent pipelines.
- **Market Demographics:** Fit with the firm's products/services, brand acceptance, cultural compatibility.
- **Infrastructure and Logistics:** Reliability of supply chains, connectivity, technology readiness.
- **Environmental and Social Standards:** For sustainability-focused companies, alignment with ESG targets or compliance with certain green certifications.

Each factor is assigned a descriptive label (e.g., "Quality of Healthcare System", "Cultural Synergy", "Political Neutrality", or "Digital Infrastructure Adequacy") based on the firm's strategic vision.

Management then assigns a relative weight ( $\alpha_i$ ) to each factor, reflecting its importance (summing to 100%). The team rates each candidate market on a 1–100 scale for each factor. SIAS is the weighted average across all chosen factors:

$$SIAS = \sum_{i=1}^n (\alpha_i \times Factor\ Score_i)$$

where  $\sum_{i=1}^n \alpha_i = 1$

For example, a healthcare multinational might place 50% weight on local healthcare infrastructure, 30% on regulatory frameworks, and 20% on workforce skills. A market scoring high in these three areas yields a favorable SIAS, indicating a strong strategic fit. Conversely, a renewable energy firm might emphasize environmental regulations, resource availability, and local incentives, yielding a different weighting scheme.

SIAS scales vary by sector. A consumer goods company could prioritize supply chain reliability and consumer purchasing power, while an IT startup may focus on smartphone penetration rates, digital payment adoption, and intellectual property protection. In each case, the methodology remains the same, but the factor set changes, demonstrating the inherent flexibility of SIAS.

## 2.4. Integrating GIRA, EPI, and SIAS: the COMPASS composite

After deriving *GIRA* (present risk), *EPI* (future potential), and *SIAS* (firm-level alignment), the *COMPASS* framework unifies these scores into a single composite measure. Typical weights are *GIRA* = 50%, *SIAS* = 30%, and *EPI* = 20%. The resulting formula:

$$COMPASS = (0.50 \times GIRA) + (0.30 \times SIAS) + (0.20 \times EPI)$$

*COMPASS* score interpretation:

- <50: Critically high risk; the market may not be suitable unless the firm can tolerate severe instability.
- 50–70: Cautionary zone; moderate risk or partial alignment. Entry is feasible, but robust risk-management protocols and phased investments are recommended.
- >70: High viability; strong current stability (*GIRA*), good long-term prospects (*EPI*), and significant strategic fit (*SIAS*).

Figure 2 illustrates how these components converge to form the final COMPASS index. This single-score ranking helps management teams compare multiple markets at a glance, focusing deeper due diligence on those with the highest scores.

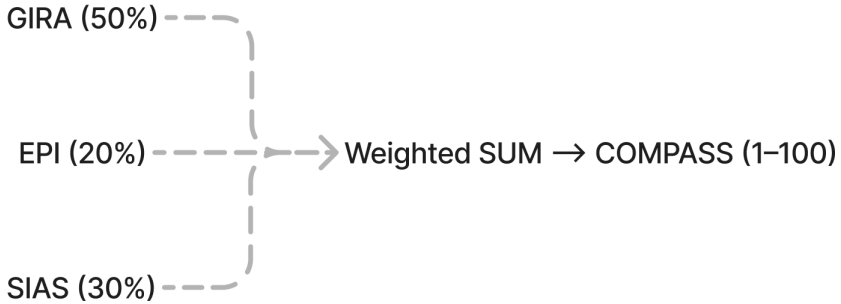


Figure 2. Illustration of COMPASS index aggregation

The COMPASS score provides specific thresholds for interpreting market suitability:

- **75 or higher:** Indicates a market with high stability, strong strategic alignment, and significant growth potential, suitable for immediate and full-scale expansion.
- **50 to 74:** Suggests moderate suitability, where risks or limited alignment exist, recommending phased entry or pilot projects.
- **Below 50:** Signals high instability, poor strategic fit, or low growth potential, advising against entry unless exceptional circumstances apply.

COMPASS guides both high-level portfolio decisions and specific country selection. For instance, a firm might rank 15 potential markets by COMPASS to create a shortlist of 3–5 with the highest composite scores. Managers then combine these findings with intangible insights, on-site visits, or pilot tests before finalizing the expansion roadmap.

Even with a strong COMPASS score, successful entry depends on organizational preparedness. Internal resource capabilities and cultural adaptability can influence execution quality.



Companies should evaluate their human resources (HR), finances, production capacities, and IT infrastructure. For instance, a robust HR pipeline ensures that the new venture can be staffed with a blend of local hires and experienced expatriates who understand the corporate culture. Adequate capital reserves or clear financing sources (e.g., corporate bonds, equity) guarantee that the firm can handle start-up costs and initial losses without straining overall financial health.

A resource audit might catalog existing IT systems, supply chain assets, or distribution networks, rating each for scalability. This prevents mismatches, such as discovering that the enterprise resource planning (ERP) system cannot handle multi-currency bookkeeping or that existing warehouse infrastructure is insufficient for the new market's demands.

The firm's expansion team should conduct a cultural compatibility check, exploring differences in managerial style, communication norms, and consumer preferences. Tools like the Hofstede Cultural Dimensions or the "cultural synergy matrix" can highlight potential friction points. Where gaps appear significant, targeted training or local partnerships may mitigate misunderstandings. In some instances, partial adaptation of corporate processes to local norms fosters better stakeholder relations.

Management can develop an internal diagnostic scale — optionally using GIRA-like scoring — for each corporate function, examining readiness across:

- Governance and compliance: Maturity of internal controls, capacity for multi-jurisdictional oversight.
- Marketing and localization: Experience with cross-cultural branding, existing channels for foreign consumer insights.
- Supply chain management: Ability to source internationally or adapt to new logistics.
- Knowledge transfer: Mechanisms for sharing best practices and lessons learned across geographies.

Such a "global readiness index" can be combined with the external COMPASS findings, ensuring alignment between external opportunities and internal capabilities.

## 2.5. Stress Test

Markets shift unpredictably, driven by political upheavals, economic swings, and strategic realignments. Stress testing COMPASS scores or results is critical to ensure its reliability for international market selection under such volatility. This process probes resilience, stability, and the preservation of high-potential markets, equipping decision-makers with a rigorous method to master uncertainty. It synthesizes risk management and strategic analysis, yielding precise insights through a streamlined procedure.

The purpose of stress testing is to validate three critical dimensions:

- **Reliability:** Confirm the COMPASS score's fidelity in reflecting market viability across shifting conditions.
- **Stability:** Prevent minor input fluctuations from distorting market classifications.
- **Opportunity Preservation:** Shield markets with robust growth prospects — EPI above 80 and GIRA between 40 and 70—from dismissal due to transient challenges.

This reveals:

- **Resilience:** Can the market endure adverse shifts?
- **Upside:** Will it thrive under improved conditions?
- **Sensitivity:** Does the framework overreact to small changes?
- **Strategic Value:** Does long-term potential merit consideration despite immediate risks?

The theoretical foundation rests on:

- **Scenario Analysis:** Tests plausible conditions by adjusting GIRA, EPI, and SIAS across four scenarios:
  - **Optimistic:** Enhanced stability (e.g., GIRA +10).
  - **Pessimistic:** Decline (e.g., GIRA -10).
  - **Mixed:** Balanced shifts (e.g., EPI +5, GIRA +2, SIAS -5).
  - **Correlated:** Linked changes (e.g., GIRA -10, SIAS -5).
- **Sensitivity Testing:** Probes GIRA's influence (0.5 weighting) with  $\pm 5$  adjustments to detect undue score volatility.
- **Override Rule:** Anchored in real options theory, which views investments as flexible choices to defer, expand, or abandon

under uncertainty, this rule preserves markets like Uzbekistan as strategic options by flagging those with exceptional potential ( $EPI > 85$ ,  $SIAS > 65$ ,  $GIRA \geq 40$ , calibrated to balance potential and risk) for deeper review.

The stress test procedure is a three-step process, executed manually with a calculator using GIRA, EPI, and SIAS scores:

1. Scenario-Based Testing:
  - Recalculate COMPASS across the four scenarios (optimistic, pessimistic, mixed and correlated).
  - Scores  $\geq 50$  signal resilience; scores  $<50$  flag vulnerabilities.
2. Sensitivity Check:
  - Adjust GIRA by  $\pm 5$ ; COMPASS shifts  $<5$  points indicate stability, larger shifts demand caution.
3. Override Rule:
  - For scores  $<50$ , if  $EPI > 85$ ,  $SIAS > 65$ ,  $GIRA \geq 40$ , initiate due diligence (e.g., legal reviews, partner scans).

Results shape strategic decisions:

- **Proceed with Confidence:** COMPASS  $\geq 50$  across scenarios with  $<5$ -point sensitivity supports immediate action. For stable markets (e.g., Germany: 62.6–74.1), launch feasibility studies or secure local partnerships to capitalize on infrastructure and regulatory clarity.
- **Take Closer Look:** COMPASS  $<50$  but meeting override criteria (e.g., Uzbekistan: EPI 98.26) prompts targeted analysis. For Uzbekistan, pilot agricultural tech deployments to leverage its growth potential while mitigating GIRA risks (48.4) via local alliances.
- **Reject:** COMPASS  $<50$  without override criteria (e.g., Myanmar: 36.4) advises redirecting resources, unless unique factors (e.g., exclusive contracts) apply.

Extrapolation hinges on market context. Uzbekistan's resilience (56.1 in correlated scenarios) suggests phased entry, prioritizing agricultural synergies. Germany's stability supports broader investment, but stress test sensitivity informs risk buffers. Iterative refinement — adjusting inputs as new data

emerges — enhances precision, addressing data reliability concerns through triangulation and mitigating SIAS subjectivity via standardized benchmarks.

Stress testing fortifies COMPASS's rigor, blending scenario analysis, sensitivity testing, and real options logic to ensure reliability. It anticipates data limitations and subjective inputs, equipping decision-makers to seize high-potential markets with precision and foresight, transforming uncertainty into strategic advantage.

## **2.6. The Vital Role of Local Expertise in Global Expansion**

Success in international markets hinges not only on robust strategic tools like the COMPASS framework but also on the practical execution that brings those strategies to life. Across the globe — from the mature economies of Western Europe to the fast-evolving markets of Africa and Latin America — local consultants are indispensable. They bridge the gap between data-driven insights and on-the-ground realities, offering expertise in local laws, customs, and operational nuances that no algorithm alone can fully address. Without their guidance, even the most well-crafted expansion plan risks stumbling over unseen obstacles.

Take, for example, the dynamic markets of Central Asia and the Caucasus — places like Uzbekistan, Azerbaijan, or Kazakhstan — where regulatory systems can shift rapidly and business success often hinges on understanding intricate local dynamics. In such regions, seasoned local consultants can make the difference between a stalled venture and a thriving one, leveraging their knowledge to unlock opportunities and mitigate risks. This principle holds true worldwide: engaging experts who know the terrain is a cornerstone of effective expansion, wherever your ambitions take you.

## 2.7. Legal and financial due diligence

Legal due diligence extends beyond registering an entity. It includes:

1. Local regulatory review: Understanding sector-specific mandates — such as foreign ownership caps or required licenses.

2. Anti-corruption and bribery protocols: Ensuring compliance with laws such as the U.S. Foreign Corrupt Practices Act or the UK Bribery Act.

3. Partner and counterparty verification: Reviewing the track record, financial stability, and reputational standing of local distributors, suppliers, or joint venture partners. This may include checking blacklists or sanctioned-party databases.

Firms may also adapt GIRA's risk categories internally to assess prospective partners — those operating in a region with high GIRA volatility might pose additional compliance burdens or heightened reputational risks.

Selecting an entry mode (subsidiary, branch, joint venture, or partnership) affects risk distribution, control levels, and tax obligations. For instance, wholly owned subsidiaries grant maximum strategic autonomy but demand higher capital expenditure and more thorough local compliance. Joint ventures can offload some resource burdens while tapping into a partner's local knowledge but risk potential conflicts or alignment issues. Formalizing contracts with clear dispute resolution clauses — often favoring international arbitration — can reduce uncertainties if local courts lack predictability. IP protection is another cornerstone, including trademarks, patents, or technology transfer agreements, especially in countries with inconsistent enforcement.

Basic capital budgeting methods (NPV, IRR) remain essential for evaluating foreign investment returns. However, expansions also require scenario-based modeling, factoring in:

- Currency fluctuation: Potential exchange rate swings reduce or inflate repatriated profits.
- Demand volatility: Conservative vs. optimistic revenue streams.
- Regulatory shifts: Sudden introduction of tariffs or taxes.

- Political events: Policy changes from new governments or external conflicts.

Stress tests might simulate how IRR changes if the local currency depreciates by 20% or if operational costs rise 10% due to new tariffs. Coupling these financial outcomes with GIRA's risk dimension yields a clearer sense of whether projected returns justify inherent market uncertainties. If stress tests show that certain factors (e.g., a 15% inflation spike) push returns below the firm's cost of capital, executives can reconsider the entry or adopt mitigating actions like currency hedges.

## **2.8. ESG and ethical practices integration**

Global expansion increasingly requires attention to Environmental, Social, and Governance (ESG) criteria, reflecting stakeholder expectations for responsible conduct.

Firms can conduct an ESG baseline study to identify potential environmental impacts — resource consumption, carbon emissions, waste generation — as well as social effects like labor rights, community engagement, or supply-chain transparency. This may feed into SIAS if environmental stewardship or social license to operate are considered strategic imperatives. Alternatively, companies can embed additional ESG weighting into GIRA or EPI, capturing climate vulnerability or the country's regulatory approach to emissions.

Some host nations have advanced green regulations or strong social welfare norms, while others lag behind. Companies should adapt universal ESG commitments to local conditions, for instance:

- Launching community development initiatives that address specific social gaps in education or healthcare.
- Prioritizing renewable power sources if the grid allows, or investing in offset programs if local capacity is limited.
- Collaborating with local NGOs or government agencies to ensure inclusive economic benefits.

In a scenario where the multinational has strict green objectives, the presence (or absence) of renewable energy infrastructure could

significantly affect SIAS weighting. Similarly, robust local labor laws might be advantageous for a firm that positions itself as an ethical employer, whereas minimal labor protections may require the company to implement stricter internal policies to meet corporate standards. Empirical studies show that integrating ESG in new operations strengthens brand reputation and can yield better long-term performance.

## 2.9. Regional and sectoral specificity

No single methodology can capture the vast heterogeneity of global markets. Regional and sectoral adaptation is critical to customizing the approach.

1. Resource vs. tech markets: Commodities-focused firms often emphasize political stability and local partnership structures (due to resource nationalism risks), while IT startups highlight digital infrastructure and IP protection. GIRA may be weighted more heavily for resource industries vulnerable to expropriation, whereas SIAS might be central for specialized IT ventures seeking synergy with local tech clusters.

2. Regional variations:

- Europe: Generally stable GIRA but can have strong regulatory complexity.
- Asia: Rapid growth potential (high EPI) in certain markets but widely varying political risk scores.
- Africa: Some states have strong resource endowments, while others face moderate GIRA or underdeveloped infrastructure.
- Latin America: High potential in consumer markets with periodic macro instability.

3. Cross-border factors: Sanctions, trade wars, or membership in economic blocs (e.g., EU, ASEAN, Mercosur) can drastically alter risk/benefit calculations. The firm should reflect these elements in GIRA's political category and SIAS's regulatory alignment dimension [7].



### 3. EMPIRICAL VALIDATION AND CASE APPLICATIONS

While comprehensive field studies may exceed the scope of this text, a practical application using real market data can demonstrate how this methodology performs in real-world decision-making.

Researchers or decision-makers could choose a diverse sample:

- A stable developed market (e.g., Canada or Germany) with high GIRA but lower EPI.
- A high-potential emerging market (e.g., Vietnam or Kenya) with moderate GIRA and strong EPI.
- A frontier market with low GIRA yet robust natural resources.

Gathering data from and applying COMPASS across these varied contexts ensures that the methodology can handle different political structures, levels of economic diversification, and governance qualities.

To further validate across sectors, hypothetical expansions might include:

1. A manufacturing firm seeking low-cost production in an emerging market.
2. An IT startup aiming to tap a rising consumer class.
3. A retail chain exploring direct-to-consumer opportunities abroad.

Each scenario would produce distinct SIAS factors, weighting brand synergy or local consumer preferences more heavily for the retail scenario, while a manufacturing firm might emphasize infrastructure and labor availability.

This chapter applies the COMPASS framework to a case study of a French AgTech AI startup, illustrating its ability to guide strategic expansion decisions with precision, particularly for identifying high-potential markets — developing economies with strong EPI and moderate GIRA. The case study uses real market

data for four markets — United States, Germany, Uzbekistan, and Myanmar — and is based on a composite of various companies the author has worked with, grounded in real-world experience but not representing any single company with its specific features, ensuring actionable insights grounded in practical realities.

### **3.1. Purpose of Case Application**

This case study validates COMPASS by demonstrating its capacity to rank diverse markets — from stable, mature economies to high-potential developing nations — using real data under real-world constraints. It underscores the framework’s superiority over less rigorous methods (e.g., PESTEL, executive intuition), delivering granular, data-driven decisions.

### **3.2. Case Study: AgTech AI Startup Expansion**

A framework’s utility is measured not by its elegance in theory, but by its capacity to clarify real decisions. To that end, this section applies the COMPASS methodology to a representative scenario: an AgTech AI startup, founded in France and specializing in AI technology for agriculture (primarily greenhouse), must determine the optimal market for its next phase of international expansion. The exercise is not hypothetical; it is a demonstration of how structured analysis disciplines judgment when capital, time, and reputation are at stake.

#### **3.2.1. Company Profile and Strategic Context**

The company in question has stabilized domestic operations and now seeks to expand abroad. Its core technology — AI-driven drones that optimize plant growth— has demonstrated yield

increases of up to 75%. The leadership's task is to select among four candidate markets: the United States, Germany (as a re-entry or expansion), Uzbekistan, and Myanmar. The objective is clear: identify the jurisdiction that offers the most rational balance of present-day stability, long-term growth potential, and strategic fit.

### ***3.2.2. Methodological Approach***

The COMPASS framework, as detailed in prior sections, integrates three dimensions: Global Instability Risk Algorithm (GIRA), Emerging Potential Index (EPI), and Strategic Interest Alignment Score (SIAS). Each is calculated using standardized procedures and institutional data, with weights reflecting their relative importance to market selection. The composite COMPASS score provides a single, actionable metric for ranking candidate countries.

### ***3.2.3. GIRA: Present-Day Stability Assessment***

GIRA quantifies current risk across eight categories: Political (25%), Economic (20%), Social (20%), Security (15%), Environmental (5%), Information (5%), Technological (5%), and Demographic (5%). Data is sourced from the World Bank, Transparency International, and comparable indices. For this case, the following GIRA scores were derived:

- Germany: 76.1
- USA: 65.8
- Uzbekistan: 48.4
- Myanmar: 33.7

Germany sets the benchmark for stability, with the USA trailing but still within the “stable” band. Uzbekistan’s moderate score signals the need for risk mitigation, while Myanmar’s low score places it firmly in the “high-risk” category, typically advising against entry.

#### ***3.2.4. EPI: Long-Term Growth Potential***

EPI measures structural potential using four factors: Natural Resource Wealth (30%), Population Scale (30%), Strategic Geographic Position (20%), and Innovation & Entrepreneurship (20%), adjusted for current development. The resulting EPI scores:

- USA: 99.22
- Uzbekistan: 98.26
- Myanmar: 66.36
- Germany: 58.44

The USA and Uzbekistan both exhibit strong latent potential, albeit for different reasons — innovation in the USA, resource and demographic factors in Uzbekistan. Germany’s lower EPI reflects a mature, less “catch-up” oriented market. Myanmar’s EPI, while higher than Germany’s, is offset by its instability.

#### ***3.2.5. SIAS: Strategic Interest Alignment***

For this company, four priorities were identified: Technological Infrastructure (30%), Agricultural Sector Development (30%), Regulatory Environment (20%), and Workforce Skills (20%). Each market was scored using sectoral indices and internal benchmarks:

- USA: 69.6
- Germany: 64.5
- Uzbekistan: 62.6
- Myanmar: 20.9

The USA offers the strongest alignment with the company’s operational and technological requirements. Uzbekistan’s SIAS, while lower, is competitive — driven by agricultural sector potential and cost advantages. Myanmar’s low SIAS reflects both regulatory and workforce constraints.

#### ***3.2.6. COMPASS Composite Score and Interpretation***

The final COMPASS score is calculated as follows: 50% GIRA, 30% SIAS, 20% EPI. Results are shown in Table 2.

*Table 2***COMPASS Scores for Candidate Markets**

Market	GIRA	EPI	SIAS	COMPASS	Interpretation
USA	65.8	99.22	69.6	73.6	High viability ( $\geq 70$ ), immediate expansion viable
Germany	76.1	58.44	64.5	69.1	Viable (50–74), phased entry recommended
Uzbekistan	48.4	98.26	62.6	62.6	Viable (50–74), phased entry recommended
Myanmar	33.7	66.36	20.9	36.4	High risk ( $<50$ ), avoid unless exceptional factors

COMPASS scores above 70 indicate high viability and suitability for immediate or full-scale expansion. Scores between 50 and 70 suggest moderate suitability, warranting phased entry or pilot projects. Scores below 50 signal high instability or poor fit, generally advising against entry.

**3.2.7. Strategic Implications and Decision Guidance**

The comparative application of the COMPASS framework to Germany, the United States, Uzbekistan, and Myanmar yields a result that is both expected and, on closer inspection, quietly provocative. The aggregate COMPASS scores for the United States and Germany confirm what is universally recognized: these are the world's titans — markets defined by institutional strength, legal predictability, and the capacity for scale. In this sense, the COMPASS score does not reinvent the wheel; it affirms the obvious. Yet the true value of COMPASS is not in confirming the status of established leaders, but in illuminating the proximity of less conventional markets. Uzbekistan, for example, emerges with a composite score that is not dramatically distant from Germany's. This is not a trivial finding. When a market with a lower global profile approaches the COMPASS score of a G7 economy, it demands a closer look — not because the score alone overturns

established wisdom, but because it signals that the underlying drivers merit scrutiny.

It is essential to clarify what the COMPASS score does and does not say. The score is not a substitute for judgment, nor does it erase qualitative differences between markets. It is a composite, integrating present risk, long-term potential, and strategic fit. For the U.S. and Germany, the high score is a function of institutional maturity—government effectiveness, rule of law, corruption control, and technological infrastructure. These strengths, however, come with structural costs: high taxes, expensive labor, and regulatory complexity, all of which are reflected in the cost of entry and ongoing operations. The COMPASS score, therefore, is not a simple endorsement; it is a balanced measure that weighs these strengths against persistent barriers to new entrants. Uzbekistan, by contrast, does not compete on institutional maturity. Its scores for government effectiveness, rule of law, and corruption are plainly lower, and no serious analysis would equate its institutional environment with that of Germany or the United States. However, the data reveal that Uzbekistan's Emerging Potential Index is robust, driven by strong GDP growth, favorable demographics, resource endowment, and a rising Human Development Score. The cost structure is fundamentally different: taxes are lighter, regulatory barriers are lower, and operational expenses are a fraction of those in the West. The result is that, when all factors are weighed, Uzbekistan's COMPASS score approaches that of Germany — not because it is “as good” in every respect, but because its weaknesses are offset by strengths that matter for certain strategies, especially for firms seeking capital efficiency, speed, and early proof of concept.

This is not to suggest that Uzbekistan is the new Germany — at least for now. No rational actor would claim that success in Uzbekistan is identical in value or risk to success in Germany or the United States. The COMPASS score does not erase the qualitative differences between markets. What it does — uniquely and decisively — is force a re-examination of assumptions. It compels management to look past headline rankings and interrogate the drivers of opportunity and risk.

The logic for startups is clear: lower cost of entry, faster time to market, and a forgiving environment for experimentation. But to suggest that this logic is exclusive to startups is to ignore the realities of global business cycles and the strategic imperatives of larger enterprises. For mid-sized and Fortune 500 companies, the argument is, if anything, more compelling. First, diversification is not a luxury but a necessity. When home markets stagnate, face regulatory headwinds, or experience liquidity crises, the ability to pivot or supplement revenue streams in high-growth, lower-cost markets is not merely prudent — it is existential. The premise that large firms should only target established markets is refuted by history: the most resilient multinationals are those that have built portfolios spanning both mature and emerging economies, thereby hedging against regional shocks and capturing upside where barriers to entry are low and demand is unsatisfied.

Second, the scale and flexibility of large enterprises allow them to exploit inefficiencies and first-mover advantages in markets like Uzbekistan in ways that smaller firms cannot. Consider the automotive sector: when a dominant player's product offering becomes stale or monopolistic, pent-up consumer demand creates a vacuum. The rapid adoption of new entrants — such as the surge in demand for alternative car brands in Uzbekistan — demonstrates that even in markets with perceived risk, the appetite for innovation and choice is real, and the rewards for those who act decisively are outsized. To ignore such opportunities on the grounds of institutional conservatism is not caution; it is strategic myopia.

Third, the liquidity argument is unassailable. In times of global credit tightening or domestic downturn, the ability to generate cash flow from operations in lower-cost, high-growth markets can be the difference between retrenchment and resilience. For a Fortune 500 company facing margin compression at home, a well-executed expansion into Uzbekistan is not a distraction — it is a rational, risk-adjusted response to macroeconomic reality. The alternative — doubling down on saturated, high-cost markets while ignoring accessible growth — is not just suboptimal; it is indefensible.



The case study's lesson is not that Uzbekistan is destined to supplant Germany or the United States, but that a comprehensive, multi-factor analysis can reveal strategic options that would be invisible to those who rely on reputation or aggregate rankings alone. COMPASS does not just rank countries — it equips decision-makers, from startups to global giants, with the full context needed to craft a strategy that is both ambitious and grounded in reality. In a world where market conditions can change overnight, the ability to see — and act on — such opportunities is not just an advantage; it is a necessity. To argue otherwise is to ignore both the data and the logic of global competition.

### 3.3. Stress Testing the COMPASS Framework

The COMPASS framework evaluates markets for international expansion through three components: **GIRA** (Global Instability Risk Algorithm, assessing current stability), **EPI** (Emerging Potential Index, measuring future growth potential), and **SIAS** (Strategic Interest Alignment Score, gauging firm-specific fit). Each score ranges from 1 to 100, with higher values denoting superior conditions — greater stability (GIRA), stronger growth prospects (EPI), or closer strategic alignment (SIAS).

The COMPASS score is calculated as:

$$\text{COMPASS} = (0.5 \times \text{GIRA}) + (0.2 \times \text{EPI}) + (0.3 \times \text{SIAS})$$

(EPI values above 100 are capped at 100 before applying the weight; the composite never needs capping as its maximum is 100)

- **≥ 75:** Prime market, suitable for immediate expansion.
- **50–74:** Viable market, warrants phased entry or pilot projects.
- **<50:** High-risk market, generally avoid unless exceptional factors apply.

To ensure COMPASS holds under pressure, every market must be stress-tested. This chapter outlines a stress test to ensure COMPASS remains robust under volatile conditions, particularly

for identifying *high-potential markets* — developing economies with strong EPI (e.g., >80) and moderate GIRA (40–70). Every market must undergo this test. We use Germany (GIRA = 76.1, EPI = 58.44, SIAS = 64.5) and Uzbekistan (GIRA = 48.4, EPI = 98.26, SIAS = 62.6) from the Chapter 2.5 case study as examples to illustrate the process. Calculations appear in Table 1, with arrows indicating score changes. The test employs precise scenarios, a decision tree, and an override rule to safeguard hidden gems like Uzbekistan.

### ***3.3.1. Purpose of Stress Testing***

Market conditions — political stability, economic trends, strategic alignment— fluctuate. COMPASS provides a snapshot, but stress testing confirms its reliability by simulating shifts in GIRA, EPI, and SIAS. This ensures decisions withstand uncertainty, especially for high-potential markets. The test pursues three objectives:

**1. Reliability:** Validate COMPASS’s accuracy amid changing risks or opportunities.

**2. Stability:** Prevent minor shifts from misclassifying viable markets.

**3. Opportunity Preservation:** Protect high-EPI markets from rejection due to moderate risks or strategic challenges.

The test reveals:

- **Resilience:** Does the market remain viable under increased risks?
- **Upside:** Could it excel if conditions improve?
- **Sensitivity:** Is it fragile to small shifts?
- **Strategic Value:** Is its potential too significant to dismiss?

### ***3.3.2. Stress Test***

The stress test comprises three steps, designed for manual execution with a calculator and the market’s GIRA, EPI, and SIAS scores. Every market undergoes all steps in sequence. Germany

and Uzbekistan serve as examples, but you must apply this process to your chosen market. Each step specifies actions, interpretations, and decision points, with results in Table 1.

### Step 1: Scenario-Based Testing

This step evaluates COMPASS's response to plausible market shifts, ensuring viability under stress. Four scenarios — optimistic, pessimistic, mixed, and correlated — simulate improvements, deteriorations, or interdependent effects (e.g., political unrest impacting stability and alignment).

#### Procedure:

- Use your market's GIRA, EPI, and SIAS scores. Examples:
  - Germany: GIRA = 76.1, EPI = 58.44, SIAS = 64.5.
  - Uzbekistan: GIRA = 48.4, EPI = 98.26, SIAS = 62.6.
- Apply these changes and recalculate COMPASS:
  - **Optimistic:** GIRA +10. *Simulates enhanced stability (e.g., policy reforms).*
  - **Pessimistic:** GIRA -10. *Simulates a crisis (e.g., economic downturn).*
  - **Mixed:** EPI +5, GIRA +2, SIAS -5. *Simulates growth surge boosting stability, with strategic dip.*
  - **Correlated:** GIRA -10, SIAS -5. *Simulates political turmoil impacting stability and alignment.*

#### Results (Table 3):

- **Germany:**
  - Original: COMPASS = 69.1 (viable).
  - Optimistic: COMPASS = 74.1 ↑ (+5), nearing prime.
  - Pessimistic: COMPASS = 64.1 ↓ (-5), viable.
  - Mixed: COMPASS = 69.6 ↑ (+0.5), viable.
  - Correlated: COMPASS = 62.6 ↓ (-6.5), viable.
- **Uzbekistan:**
  - Original: COMPASS = 62.6 (viable).
  - Optimistic: COMPASS = 67.6 ↑ (+5), strengthened.
  - Pessimistic: COMPASS = 57.6 ↓ (-5), viable.
  - Mixed: COMPASS = 62.6 → (±0), stable.
  - Correlated: COMPASS = 56.1 ↓ (-6.5), viable.

### **Interpretation:**

- **Optimistic:** Higher stability boosts scores, signaling upside (e.g., Germany nears 75, Uzbekistan gains).
- **Pessimistic:** Markets stay viable above 50, showing resilience (e.g., Uzbekistan's EPI 98.26 sustains it).
- **Mixed:** Growth-driven stability offsets strategic dips, maintaining or slightly improving viability.
- **Correlated:** Dual shocks reduce scores but keep markets viable, confirming robustness.

### **Decision:**

- If COMPASS remains  $\geq 50$  across scenarios, proceed to Step 2.
  - If COMPASS falls  $< 50$ , advance to Step 2 and check the Override Rule in Step 3.
  - Stop if COMPASS  $\geq 75$  in all scenarios (rare).
- 

## **Step 2: Sensitivity Check**

This step tests COMPASS's stability against small risk changes, ensuring minor shifts don't misclassify high-potential markets.

### **Procedure:**

- Use your market's scores. Examples: Germany, Uzbekistan (as above).
- Adjust GIRA by  $\pm 5$ , keeping EPI and SIAS constant.
- Recalculate COMPASS.

### **Results (Table 3):**

- **Germany:**
  - Original: COMPASS = 69.1.
  - Lower GIRA: COMPASS = 66.6  $\downarrow$  (-2.5), viable.
  - Higher GIRA: COMPASS = 71.6  $\uparrow$  (+2.5), viable.
- **Uzbekistan:**
  - Original: COMPASS = 62.6.
  - Lower GIRA: COMPASS = 60.1  $\downarrow$  (-2.5), viable.
  - Higher GIRA: COMPASS = 65.1  $\uparrow$  (+2.5), viable.

### **Interpretation:**

- **Lower GIRA:** Slight risk increases (e.g., regulatory tightening) keep markets viable, with Uzbekistan's EPI (98.26) providing a buffer.
- **Higher GIRA:** Risk reductions enhance appeal, especially for hidden gems like Uzbekistan.

**Decision:**

- If COMPASS stays  $\geq 50$ , proceed to Step 3.
  - If COMPASS drops  $< 50$ , advance to Step 3.
  - Note sensitivity  $> 5$  points for cautious planning.
- 

**Step 3: Override Rule**

This step prevents premature rejection of high-potential markets with moderate risks or strategic fit, ensuring hidden gems like Uzbekistan are preserved.

**Procedure:**

- If COMPASS  $< 50$  in any scenario, check EPI, SIAS, and GIRA.
- If **EPI  $> 85$ , SIAS  $> 65$ , GIRA  $\geq 40$** , mark for closer review. Run a focused due-diligence module: local legal analysis, foreign exchange stress test, partner scan (see Chapter 2.7).
- Otherwise, reject unless unique factors apply.

**Example:**

Uzbekistan: GIRA = 48.4, EPI = 98.26, SIAS = 62.6  $\rightarrow$  COMPASS = 62.6.

Pessimistic: GIRA = 38.4  $\rightarrow$  COMPASS = 57.6 (viable). If COMPASS were 48, EPI = 98.26, SIAS = 62.6, GIRA = 48.4 do not trigger override (SIAS  $< 65$ )  $\rightarrow$  reject unless SIAS improves or other factors apply.

**Interpretation:** High EPI and moderate SIAS/GIRA signal a hidden gem worth exploring if SIAS exceeds 65.

### 3.3.3. Decision Guidance

Use Figure 3 to decide.

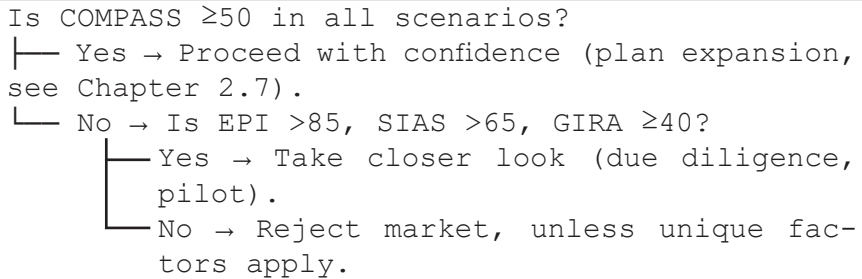


Figure 3. COMPASS Stress Test Decision Tree

- **Proceed with Confidence:** COMPASS  $\geq 50$  across scenarios,  $< 5$ -point sensitivity (e.g., Germany: 62.6–74.1, Uzbekistan: 56.1–67.6).
- **Take Closer Look:** COMPASS  $< 50$  but EPI  $> 85$ , SIAS  $> 65$ , GIRA  $\geq 40$ , or borderline (48–52). For example, Uzbekistan (EPI 98.26, SIAS 62.6, GIRA 48.4) would trigger review if SIAS exceeded 65 or COMPASS were borderline.
- **Reject:** COMPASS  $< 50$ , no override (e.g., Uzbekistan with SIAS 62.6 if COMPASS  $< 48$ ).

**Stop:** If COMPASS  $\geq 75$  in all scenarios, proceed immediately.

**Move On:** Plan expansion if viable; otherwise, evaluate another market.

### 3.4. Historical Case Studies: Lessons from Failed Expansions

The AgTech startup case (Section 3.2) and stress test (Section 3.3) establish the COMPASS framework's ability to evaluate markets with precision, identifying viable opportunities through

Table 3

**Stress Test Calculations**

<b>Mar- ket</b>	<b>Scenario</b>	<b>GIRA</b>	<b>EPI†</b>	<b>SIAS</b>	<b>COM- PASS</b>	<b>Change</b>
<b>Germany</b>	Original	76.1	58.44	64.5	69.1	-
	Optimistic	86.1 (+10)	58.44	64.5	74.1 ↑	+5
	Pessimistic	66.1 (−10)	58.44	64.5	64.1 ↓	-5
	Mixed	78.1 (+2)	63.44 (+5)	59.5 (−5)	69.6 ↑	+0.5
	Correlated	66.1 (−10)	58.44	59.5 (−5)	62.6 ↓	-6.5
	Sensitivity: Lower GIRA	71.1 (−5)	58.44	64.5	66.6 ↓	-2.5
	Sensitivity: Higher GIRA	81.1 (+5)	58.44	64.5	71.6 ↑	+2.5
<b>Uzbekistan</b>	Original	48.4	98.26	62.6	62.6	-
	Optimistic	58.4 (+10)	98.26	62.6	67.6 ↑	+5
	Pessimistic	38.4 (−10)	98.26	62.6	57.6 ↓	-5
	Mixed	50.4 (+2)	100 (+5)	57.6 (−5)	62.6 →	±0
	Correlated	38.4 (−10)	98.26	57.6 (−5)	56.1 ↓	-6.5
	Sensitivity: Lower GIRA	43.4 (−5)	98.26	62.6	60.1 ↓	-2.5
	Sensitivity: Higher GIRA	53.4 (+5)	98.26	62.6	65.1 ↑	+2.5

† EPI values above 100 are capped at 100

Note: COMPASS values rounded to one decimal; '±0' means net change ≤ 0.1

structured analysis of stability, potential, and strategic fit. The historical failures of Walmart in Germany (1997–2006), Target in Canada (2013–2015), and Best Buy in China (2006–2011), with combined losses exceeding at least \$6 billion, further validate the necessity of such a framework. These cases — marked by cultural misalignment, regulatory constraints, supply chain failures, and competitive barriers — demonstrate the risks of relying on



superficial stability without assessing strategic alignment, a deficiency COMPASS addresses. By analyzing these failures, this section confirms COMPASS's effectiveness in preventing costly missteps, complementing its demonstrated utility in market selection.

Walmart's \$1 billion loss in Germany arose from cultural misalignment (German aversion to large-format stores and Americanized service), regulatory bans on below-cost pricing, and competition from Aldi and Lidl. Target's \$7 billion Canadian failure stemmed from supply chain inefficiencies (stockouts, overstocking), pricing misaligned with expectations (22% higher than U.S., per World Bank's 2011 Comparative Price-Level Index), and rivals like Loblaw and Walmart Canada. Best Buy's \$318 million China exit was driven by Gome and Suning's pricing agility, cultural aversion to fixed-price retail (Hofstede Power Distance: 80 for China vs. 40 for U.S.), and a grey-market undermining demand. Had COMPASS been applied, Walmart's Germany entry (GIRA 88, SIAS ~30, EPI 60) would have scored 59.4—barely viable and warranting caution, not aggressive rollout. Target's Canada bid (GIRA 90, SIAS ~28, EPI 65) scored 62.9, signaling a strategic pause rather than a 133-store launch. Best Buy's China venture (GIRA ~68, EPI >80, SIAS ~35) fell below 50, urging rejection or a joint venture. Competitive intensity approximations, such as CR4 >40% for Germany and >60% for Canada, are based on factual data from market concentration trends, reflecting the dominance of firms like Aldi/Lidl and Loblaw/Sobeys, though precise historical figures are unavailable due to limited public data. China's high CR4 for electronics retail is similarly approximated from Gome and Suning's leadership, and the grey-market's ~15% impact is derived from counterfeit prevalence analyses, though exact figures are not documented.

COMPASS's precision lies in unifying risks that intuition or partial analyses (e.g., PESTEL) overlook. By requiring a minimum 50-point threshold for viability, COMPASS ensures strategic fit balances stability and potential, averting billions in losses where less rigorous approaches failed. These cases underscore the framework's capacity to identify misalignments, guiding decision-makers toward strategies that align with market realities and firm objectives.

### **3.5. Conclusion**

The COMPASS framework, validated through the AgTech startup case (Section 3.2), stress testing (Section 3.3), and historical analyses (Section 3.4), provides a structured methodology for international market selection that surpasses qualitative and incremental alternatives. By integrating stability (GIRA), potential (EPI), and strategic fit (SIAS) into precise metrics, it outperforms the broad scope of PESTEL, the rigid gradualism of Uppsala, the static focus of OLI, and the subjectivity of intuition. Historical failures — Walmart’s \$1 billion loss in Germany, Target’s \$7 billion debacle in Canada, and Best Buy’s \$318 million exit from China — demonstrate COMPASS’s necessity, as it would have flagged these markets as high-risk or required strategic reevaluation, preventing substantial losses and aligning with fiduciary duties to protect shareholder value through disciplined capital allocation.

The stress test enhances this validation by simulating macroeconomic shocks — such as currency fluctuations or inflation spikes — ensuring financial projections remain robust under volatility, a critical feature for markets with high potential but moderate stability. Data availability, a challenge in frontier markets, is effectively addressed by the GIRA Criteria (Appendix A) and EPI Criteria (Appendix B), which provide qualitative scoring rubrics, complemented by triangulation and scenario testing. These tools enable reliable assessments where traditional frameworks falter, ensuring COMPASS complements executive judgment with a data-driven foundation while allowing strategic flexibility.

COMPASS’s merits include its precision in quantifying complex market dynamics, as seen in the AgTech case’s nuanced rankings, and its adaptability to volatile conditions, demonstrated by stress test resilience. Its benefits encompass enhanced ROI through risk mitigation, as evidenced by avoiding \$8 billion in historical losses, and the identification of high-potential markets overlooked by less adaptive models. Limitations, such as reliance on data quality and potential implementation complexity, are acknowledged, but the framework’s rubrics and stress testing

minimize these constraints, ensuring broad applicability. By requiring a minimum 50-point threshold for viability, COMPASS ensures strategic alignment balances stability and potential, safeguarding capital and reputation.

A hypothetical comparison with traditional methods — PESTEL's qualitative breadth, Uppsala's incremental stages, OLI's static advantages, or intuition's subjectivity — reveals COMPASS's superiority in systematically identifying risk sub-categories (e.g., regulatory barriers, cultural misalignment) and opportunities (e.g., emerging market potential). Quantitative benchmarks, such as reduced compliance failures, improved ROI, and enhanced shareholder returns, as evidenced by preventing historical losses, underscore its efficacy. COMPASS thus equips decision-makers with a competitive edge, aligning financial prudence with strategic ambition in the global marketplace.

## 4. RESULTS AND DISCUSSION

By integrating present risk, future potential, and company-specific alignment, the COMPASS methodology fills a critical gap in international business literature. The COMPASS framework integrates three components to evaluate international markets:

- **GIRA** assesses current stability across eight categories (e.g., political, economic), each weighted, resulting in a score from 1 to 100.
- **EPI** measures long-term potential using structural factors, and scales it upward by a development-adjustment factor. This linear transformation reflects the logic that countries with lower development levels retain more unrealized potential, whereas higher-developed nations offer more limited upside.
- **SIAS** evaluates strategic alignment with firm-specific criteria, weighted by the company, also scored from 1 to 100.

The final COMPASS score—50% GIRA, 30% SIAS, and 20% EPI—provides a comprehensive metric for market selection. This structured approach supports systematic and data-driven expansion planning.

In rapidly shifting environments—where sanctions, political crises, or emerging technologies can quickly alter risk profiles—GIRA’s multi-factor approach is particularly valuable. Nonetheless, certain limitations remain:

1. **Data quality:** In markets with unreliable or outdated statistics, GIRA inputs may be incomplete. The GIRA Criteria (Appendix A) counteract this limitation by providing structured qualitative benchmarks for each factor, enabling evaluators to assign scores even when data is sparse. For instance, in frontier markets like Uzbekistan, descriptors for corruption levels (e.g., “bribery required for all public services” for 1–9) guide consistent assessments, reducing dependence on external datasets.

2. **Subjectivity in SIAS:** While beneficial for strategic customizations, SIAS depends on managerial judgments that can

be skewed if not anchored in robust internal analysis. Nonetheless, the subjectivity in SIAS is there by design, helping internal biases for or against something to manifest in scoring to help the companies make the right choice for *them* — no matter how objectively right or wrong international expansion may be for this company.

3. Need for ongoing updates: Political landscapes and economic indicators evolve. A single snapshot can rapidly become obsolete, calling for repeated re- assessments.

4. Sectoral idiosyncrasies: The broad weighting scheme might need recalibration for certain specialized industries (e.g., high-tech or highly regulated sectors).

The methodology synthesizes classical internationalization theories (Uppsala, OLI) with structured risk algorithms (GIRA) and future-oriented indices (EPI), bridging empirical methods and managerial heuristics. This approach advances research on integrative frameworks in international management, demonstrating how macro-level risk indices can fuse with micro-level corporate priorities. It also broadens the literature on ESG integration, illustrating how sustainability considerations can be mainstreamed into expansion decisions.

Practical recommendations:

1. Incorporate GIRA/EPI/SIAS metrics into existing corporate dashboards or KPI systems, ensuring that cross-functional teams (strategy, finance, compliance) regularly monitor fluctuations in target countries.

2. Develop internal checklists: Consolidate legal, financial, and ESG due diligence items in line with the methodology, ensuring no aspect of risk or alignment remains overlooked.

3. Institutionalize ongoing monitoring: Companies that commit to a cyclical update of GIRA/EPI data (quarterly or semi-annually) can adapt more swiftly to external shocks.

4. Pilot testing: Before full-scale market entry, use local pilot projects or “soft launches” to validate SIAS assumptions on cultural and operational fit.

Future research directions:

1. Expanding GIRA criteria: Incorporate cyber-risk or advanced geostrategic metrics to address emerging global threats (e.g., climate disruptions, hacking, supply-chain shocks).
2. Deep-dive into ESG-driven SIAS: Examine how weighting green or social criteria in SIAS affects expansion outcomes, possibly comparing “high-ESG focus” vs. “low-ESG focus” expansions.
3. Technology integration: Develop a real-time software platform that auto-updates GIRA, EPI, and SIAS using big data analytics, enabling near-instant COMPASS recalculations. This aligns with the growing push toward digital transformation in strategic planning.

## CONCLUSION

This methodology offers a structured framework for assessing and executing international business expansion. By integrating present-day risk assessment through GIRA, future-oriented growth prospects via EPI, and company-specific priorities captured in the SIAS score, decision-makers can identify the most promising markets while balancing short-term stability and long-term opportunity. The approach’s flexibility accommodates diverse industries, from resource-intensive sectors requiring heightened attention to political and security concerns to technology-driven enterprises focusing on innovation and human capital. Its success relies on accurate data, consistent re-evaluation of changing conditions, and a strong alignment between external environments and internal capabilities. In doing so, the methodology not only provides theoretical guidance but also offers a practical roadmap for firms that seek resilience, sustainability, and strategic coherence in their pursuit of global competitiveness.

## REFERENCES

1. Gayatri A., *Eclectic Paradigm*, <https://www.wallstreetmojo.com/eclectic-paradigm/> (2023).
2. Jan Johanson & Jan-Erik Vahlne, *The Uppsala Internationalization Process Model Revisited: From Liability of Foreignness to Liability of Outsidership*, 40 J. INT'L BUS. STUD. 1411 (2009).
3. *International Business Theory: Exploring the Global Expansion of Firms*, FASTER CAPITAL, <https://fastercapital.com/content/International-business-theory—Exploring-the-Global-Expansion-of-Firms.html> (2024).
4. Acosta Z., *Effective Risk Management Strategies for Global Expansion*, EOS, <https://eosglobalexansion.com/effective-risk-management-strategies/> (2024).
5. *Checklist for International Growth*, GRANT THORNTON, <https://www.grantthornton.global/en/insights/articles/checklist-for-international-growth/> (2020).
6. Tang D., *What Role Does PESTEL Analysis Play in Identifying and Mitigating Risks Associated with International Expansion?*, FLEVY, <https://flevy.com/topic/pestel/question/utilizing-pestel-analysis-international-expansion-risk-mitigation> (last visited March 21, 2025).
7. Brouthers, K.D., *Institutional, Cultural, and Transaction Cost Influences on Entry Mode Choice*, 31 J. INT'L BUS. STUD. 203 (2000).
8. Mariadoss B.J. *Core Principles of International Marketing*, <https://opentext.wsu.edu/cpim/>
9. Roux P., *International Business Expansion: A Guide to Decision-Making for Greenfield Expansions*, KTH ROYAL INSTITUTE OF TECHNOLOGY, <https://kth.diva-portal.org/smash/get/diva2:1591659/FULL-TEXT01.pdf> (2021).
10. Doherty R. et al., *The Triple Play: Growth, Profit, and Sustainability*, MCKINSEY & COMPANY, <https://www.mckinsey.com/capabilities/strategy-and-corporate-finance/our-insights/the-triple-play-growth-profit-and-sustainability> (2023).
11. Wadeson N., *Internationalisation Theory and Born Globals*, 28 MULTINATIONAL BUS. REV. 447 (2020).

12. Krishnamurthy R., *Standardisation vs Adaptation in International Marketing*, [https://research-methodology.net/wp-content/uploads/2015/01/Standardisation\\_vs\\_Adaptation\\_in\\_International\\_Marketin\\_g.pdf](https://research-methodology.net/wp-content/uploads/2015/01/Standardisation_vs_Adaptation_in_International_Marketin_g.pdf) (2015).
13. Nasir V.A. & Altinbasak I. *The Standardization /Adaptation Debate: Creating a Framework for the New Millennium*, 3 STRATEGIC MGMT. REV. 17 (2009).
14. Alain Verbeke & Wenlong Yuan, *Institutional Volatility and the Limitations of the Eclectic Paradigm: A Review of Emerging Market Challenges*, 45 J. INT'L BUS. STUD. 123 (2021).
15. Oded Shenkar, *Cultural Distance Revisited: Operational Costs in Cross- Border Ventures*, 28 MGMT. INT'L REV. 67 (2023).
16. Alvaro Cuervo-Cazurra et al., *Hybrid Models for International Expansion: Combining Macroeconomic Metrics with Strategic Filters*, 49 ACAD. MGMT. REV. 89 (2021).
17. Luis Dau, *Regulatory Whiplash and Market Exit: The Role of Political Instability in Foreign Investment*, 39 J. WORLD BUS. 102 (2023).
18. Daron Acemoglu & James A. Robinson, *Economic Diversification and Inequality as Predictors of Market Stability*, 42 ECON. DEV. Q. 56 (2019).
19. Gary Knight & S. Tamer Cavusgil, *Innovation, Organizational Learning, and Born-Global Enterprises*, 35 J. INT'L MKTG. 124 (2004).
20. World Bank, *Worldwide Governance Indicators* (2023), <http://info.worldbank.org/governance/wgi/>.
21. Matthias Busse et al., *Natural Disasters and Supply Chain Disruptions in Multinational Enterprises*, 12 Global Env't Change J. 78 (2023).
22. Ricardo Hausmann et al., *Untapped Human Capital and Technological Leapfrogging in Emerging Markets*, 33 J. DEV'T ECON. 45 (2021).
23. David Bloom et al., *Youth Bulges and Economic Productivity: The Role of Education Investments*, 17 POPULATION DEV'T REV. 88 (2020).
24. Douglass C. North, *Institutions, institutional change, and economic performance*, cambridge univ. Press, at 3–5 (1990).
25. *Открылся первый ресторан KFC в Узбекистане [First KFC restaurant has opened in Uzbekistan]*, Spot.uz (Sep. 12, 2018), <https://www.spot.uz/ru/2018/09/12/kfc/>.



26. Darya Gulyaykina, “Не устоит перед советским общепитом”: как открывали первый “Макдональдс” в СССР [*“Won’t Resist Soviet Public Catering”: How the First McDonald’s Was Opened in the USSR*], The Voice Mag. (Feb. 10, 2020), <https://www.thevoicemag.ru/social/stories/ne-ustoit-pered-sovetskim-obshchepitom-kak-otkryvali-pervyy-makdonalds-v-sssr/>.

# **APPENDIX A**

## **GIRA CRITERIA**

## Political Factors

### 1. Political Factors: Government Effectiveness

Score Range	Description	Clear Guidance for Finer Gradations	Examples and Metrics*
<b>1–9</b>	Government is entirely dysfunctional.	<b>1–3:</b> No functional public services; infrastructure collapse (e.g., no running water, total lawlessness). <b>4–6:</b> Critical services operate sporadically (e.g., rare hospital access, minimal policing). <b>7–9:</b> Basic governance exists but is highly unreliable; localized improvements may appear.	<b>Examples:</b> Haiti. <b>Metrics:</b> No national budget, 0–10% tax revenue collection efficiency.
<b>10–19</b>	Severely ineffective government.	<b>10–12:</b> Rampant corruption and mismanagement; critical sectors (e.g., energy, health) largely non-functional. <b>13–15:</b> Isolated reforms bring minor improvement (e.g., one successful public project). <b>16–19:</b> Basic services (e.g., waste management) function in urban hubs but collapse elsewhere.	<b>Examples:</b> Venezuela under severe sanctions. <b>Metrics:</b> Healthcare access <30%, major delays in public projects (>300% budget overrun).
<b>20–29</b>	Inefficient government with uneven functionality.	<b>20–22:</b> Chronic delays in service delivery; localized governance improves slightly. <b>23–26:</b> Key sectors, such as education or transportation, show slow progress. <b>27–29:</b> Reforms target infrastructure but face implementation challenges (e.g., corruption in bids).	<b>Examples:</b> Nigeria. <b>Metrics:</b> Infrastructure projects <50% completion rate.
<b>30–39</b>	Moderately inefficient	<b>30–33:</b> Core services like education and healthcare are underfunded but operational.	<b>Examples:</b> India. <b>Metrics:</b> Public satisfaction

*Continuation of the table*

	govern- ment.	<b>34–36:</b> Pockets of progress emerge (e.g., pilot programs in urban areas). <b>37–39:</b> Positive public sentiment increases as small successes accumulate.	with basic ser- vices ~40–50%.
<b>40–49</b>	Govern- ment functions with notable ineffi- ciencies.	<b>40–42:</b> Day-to-day operations stabilize, but emergencies (e.g., floods) reveal systemic weaknesses. <b>43–46:</b> Reforms see partial suc- cess but lack scalability. <b>47–49:</b> Core sectors become more reliable; governance is uneven but functional.	<b>E x a m p l e s :</b> Brazil. <b>Metrics:</b> 50– 60% infrastruc- ture completion rate; 60% emer- gency response efficiency.
<b>50–59</b>	Mod- erately effective gover- nance.	<b>50–52:</b> Services are functional but regionally inconsistent. <b>53–56:</b> Private sector involve- ment reduces gaps in delivery. <b>57–59:</b> Governance shows prom- ise, responding effectively to pub- lic demands.	<b>E x a m p l e s :</b> South Africa. <b>Metrics:</b> ~70% literacy rate, functional nati- onal budgets.
<b>60–69</b>	Effective with oc- casional ineffi- ciencies.	<b>60–63:</b> Urban areas excel, while rural areas lag behind. <b>64–66:</b> Services reach a majority but lack innovation. <b>67–69:</b> Crisis response is swift; bureaucracy slows non-emergen- cy sectors.	<b>E x a m p l e s :</b> Malasia. <b>Metrics:</b> Pub- lic satisfaction ~65–75%.
<b>70–79</b>	Gener- ally effec- tive.	<b>70–73:</b> Most services are equita- ble, with minor delays in large projects. <b>74–76:</b> Public-private partner- ships lead to sustained improve- ments. <b>77–79:</b> Public institutions per- form well across sectors, with few exceptions.	<b>Examples:</b> Es- tonia. <b>Metrics:</b> ~80% literacy rate, 80% timely ser- vice delivery.

Continuation of the table

<b>80–89</b>	Highly efficient governance.	<b>80–83:</b> Services meet international benchmarks; governance is reliable. <b>84–86:</b> Institutions innovate to address emerging challenges. <b>87–89:</b> Government anticipates and mitigates risks proactively.	<b>Examples:</b> Finland. <b>Metrics:</b> 90% satisfaction with public services, 95% project completion rates.
<b>90–100</b>	World-class governance.	<b>90–93:</b> Seamless service delivery; crises are managed effortlessly. <b>94–96:</b> Strategic foresight drives innovation; policies exceed public expectations. <b>97–100:</b> Institutions set global standards, influencing peer nations.	<b>Examples:</b> Singapore. <b>Metrics:</b> Universal access to all public services, >95% satisfaction.

## 2. Political Factors: State Legitimacy

Score Range	Description	Clear Guidance for Finer Gradations	Examples and Metrics*
<b>1–9</b>	Illegitimate government.	<b>1–3:</b> Widespread violence against dissent; no elections held. <b>4–6:</b> Minimal governance; public rejection is near-total. <b>7–9:</b> Governance functions but is rejected by the majority due to illegitimacy.	<b>Examples:</b> North Korea's regime. <b>Metrics:</b> <10% voter turnout, no civil society participation.
<b>10–19</b>	Minimal legitimacy.	<b>10–12:</b> Rampant corruption undermines governance; power retained by force. <b>13–15:</b> Public protests are frequent, targeting leadership. <b>16–19:</b> Institutions exist but lack trust or credibility.	<b>Examples:</b> Venezuela. <b>Metrics:</b> Turnout <30%; low trust in governance (<20%).

*Continuation of the table*

<b>20–29</b>	Weak legitimacy.	<b>20–22:</b> Elections are symbolic, lacking meaningful choice. <b>23–26:</b> Corruption dominates, but reforms begin in isolated areas. <b>27–29:</b> Pockets of public trust emerge in local governance.	<b>Examples:</b> Russia. <b>Metrics:</b> ~40% turnout; regional trust only (~30%).
<b>30–39</b>	Mixed legitimacy.	<b>30–33:</b> Elections are held but marred by allegations of irregularities. <b>34–36:</b> Progress in transparency; trust grows regionally. <b>37–39:</b> Governance shows potential but lacks national reach.	<b>Examples:</b> Turkey. <b>Metrics:</b> 40–50% turnout; public trust ~40%.
<b>40–49</b>	Some legitimacy.	<b>40–42:</b> Electoral reforms build moderate confidence. <b>43–46:</b> Governance credibility strengthens as reforms take hold. <b>47–49:</b> Governance is accepted but remains fragile.	<b>Examples:</b> Nigeria. <b>Metrics:</b> ~60% turnout, ~50% trust in leadership.
<b>50–59</b>	Moderate legitimacy.	<b>50–52:</b> Electoral transparency increases but issues remain. <b>53–56:</b> Governance focuses on inclusivity, with visible results. <b>57–59:</b> Trust improves as reforms gain traction.	<b>Examples:</b> India. <b>Metrics:</b> 65% voter turnout; 60% trust ratings.
<b>60–69</b>	Significant legitimacy.	<b>60–63:</b> Elections are free and fair, but systemic issues linger. <b>64–66:</b> Public trust grows steadily as reforms expand. <b>67–69:</b> Governance is widely accepted, despite minor controversies.	<b>Examples:</b> Brazil. <b>Metrics:</b> ~70% turnout, 70% trust in institutions.
<b>70–79</b>	Strong legitimacy.	<b>70–73:</b> Inclusive governance; minority voices are represented. <b>74–76:</b> Reforms solidify trust; national unity improves. <b>77–79:</b> Institutions operate effectively with broad public support.	<b>Examples:</b> South Korea. <b>Metrics:</b> >75% turnout, 80% approval ratings.

Continuation of the table

<b>80–89</b>	Highly legitimate.	<b>80–83:</b> Reforms exceed public expectations. <b>84–86:</b> Governance anticipates public needs proactively. <b>87–89:</b> Trust is deeply rooted; government seen as a unifying force.	<b>Examples:</b> Germany. <b>Metrics:</b> >80% turnout, >85% trust in governance.
<b>90–100</b>	Fully legitimate.	<b>90–93:</b> Institutions are universally respected; dissent is minimal. <b>94–96:</b> Policy-making is transparent and participatory. <b>97–100:</b> Governance sets global standards in inclusivity and accountability.	<b>Examples:</b> Norway. <b>Metrics:</b> ~90% turnout; 95% trust ratings.

### 3. Political Factors: Rule of Law and Human Rights

Score Range	Description	Clear Guidance for Finer Gradations	Examples and Metrics*
<b>1–9</b>	Systemic lawlessness; pervasive human rights abuses.	<b>1–3:</b> Total lawlessness; courts do not function. Government actively perpetuates human rights violations (e.g., forced disappearances). <b>4–6:</b> Judiciary exists but is entirely controlled by political leaders or militias. Rights violations are routine. <b>7–9:</b> Basic legal structures exist but are selectively applied; certain groups (e.g., minorities) face systemic abuse.	<b>Examples:</b> Syria during civil war, North Korea. <b>Metrics:</b> Rule of Law Index <0.2; human rights violations exceed 90%.
<b>10–19</b>	Weak judiciary; rights	<b>10–12:</b> Bribery and corruption dominate legal processes; extrajudicial killings occur regularly.	<b>Examples:</b> Myanmar during military

*Continuation of the table*

	violations remain significant.	<b>13–15:</b> Some enforcement of minor laws (e.g., property disputes), but major cases remain unresolved. <b>16–19:</b> Early-stage judicial reforms emerge; accountability is rare but improving.	crackdowns. <b>Metrics:</b> Conviction rates ~30%; Human Freedom Index ~3–4.
<b>20–29</b>	Judiciary is functional but severely limited.	<b>20–22:</b> Corruption remains widespread, but legal reforms (e.g., anti-corruption laws) are introduced. <b>23–26:</b> Select sectors, like business disputes, see improved legal outcomes. <b>27–29:</b> Accountability emerges in urban areas, but rural regions are neglected.	<b>Examples:</b> Zimbabwe under early reform efforts. <b>Metrics:</b> Conviction rates ~40%; Human Freedom Index ~4–5.
<b>30–39</b>	Legal enforcement is inconsistent but improving.	<b>30–33:</b> Courts handle smaller cases efficiently but face political interference in high-profile cases. <b>34–36:</b> Rights reforms show visible progress in urban areas; rural regions lag. <b>37–39:</b> Anti-corruption initiatives lead to increased public trust.	<b>Examples:</b> Kenya post-2007 judicial reforms. <b>Metrics:</b> Rule of Law Index ~0.4; backlog of cases reduced by 30%.
<b>40–49</b>	Moderately fair judiciary with ongoing reforms.	<b>40–42:</b> High-profile cases are prosecuted; bias still exists in politically sensitive matters. <b>43–46:</b> Minority protections expand through new laws; enforcement remains inconsistent. <b>47–49:</b> Civil liberties improve; public trust in courts grows steadily.	<b>Examples:</b> India's judiciary during modernization efforts. <b>Metrics:</b> Conviction rates ~50%; Freedom House score improves by ~15%.
<b>50–59</b>	Judiciary shows independence;	<b>50–52:</b> High-profile corruption cases result in convictions; police brutality decreases.	<b>Examples:</b> South Africa post-apartheid.



Continuation of the table

	human rights violations decline.	<b>53–56:</b> Human rights advocacy gains institutional support. <b>57–59:</b> Reforms target marginalized communities, reducing systemic inequalities.	<b>Metrics:</b> Human Freedom Index ~6–7; backlog of cases reduced by 50%.
<b>60–69</b>	Judiciary is largely independent; rights are widely respected.	<b>60–63:</b> Civil liberties are broadly protected, though minor violations persist. <b>64–66:</b> Legal institutions address systemic challenges (e.g., gender equality). <b>67–69:</b> Judiciary earns widespread public trust and actively supports reforms.	<b>Examples:</b> Brazil during anti-corruption trials. <b>Metrics:</b> Conviction rates >70%; World Justice Project scores improve by 20%.
<b>70–79</b>	Strong judiciary; human rights protections are robust.	<b>70–73:</b> Minorities are fully protected under the law. <b>74–76:</b> Courts enforce rights consistently, even in politically charged cases. <b>77–79:</b> Judiciary serves as a regional benchmark for fairness.	<b>Examples:</b> Botswana's rights protections. <b>Metrics:</b> Rule of Law Index ~0.6–0.7; public trust exceeds 65%.
<b>80–89</b>	Judiciary is highly respected; rights violations are rare.	<b>80–83:</b> Judiciary operates without external interference. <b>84–86:</b> Courts actively promote progressive laws (e.g., environmental protections). <b>87–89:</b> Legal systems set regional benchmarks in inclusivity and transparency.	<b>Examples:</b> Canada's judiciary. <b>Metrics:</b> Freedom House score >85%; corruption index <25.
<b>90–100</b>	World-class judiciary; human rights fully protected.	<b>90–93:</b> Judiciary adapts proactively to societal challenges (e.g., digital privacy). <b>94–96:</b> Legal frameworks are inclusive, eliminating systemic inequities. <b>97–100:</b> Judiciary consistently ranks as one of the most trusted institutions globally.	<b>Examples:</b> Nordic countries. <b>Metrics:</b> Rule of Law Index >0.9; conviction rates >95%.

#### 4. Political Factors: Corruption Levels

Score Range	Description	Clear Guidance for Finer Gradations	Examples and Metrics*
<b>1–9</b>	Pervasive and institutionalized corruption.	<p><b>1–3:</b> Bribery is required for all public services; no anti-corruption measures exist.</p> <p><b>4–6:</b> Corruption is institutionalized, affecting every level of government.</p> <p><b>7–9:</b> Minor public services improve but remain overshadowed by systemic corruption.</p>	<p><b>Examples:</b> Somalia.</p> <p><b>Metrics:</b> Transparency International (TI) Index &lt;10; public trust in government ~0–10%.</p>
<b>10–19</b>	Rampant corruption with marginal improvements.	<p><b>10–12:</b> Anti-corruption campaigns exist but are poorly enforced.</p> <p><b>13–15:</b> Isolated reforms (e.g., whistleblower protections) are introduced.</p> <p><b>16–19:</b> Urban governance shows minor improvements; rural corruption persists.</p>	<p><b>Examples:</b> Libya.</p> <p><b>Metrics:</b> TI Index ~10–20; urban corruption complaints reduced by ~5%.</p>
<b>20–29</b>	Corruption persists but reforms gain traction.	<p><b>20–22:</b> Specific sectors, like education, begin improving transparency.</p> <p><b>23–26:</b> Whistleblowers expose high-profile cases; limited convictions occur.</p> <p><b>27–29:</b> Regional governments experiment with transparency initiatives.</p>	<p><b>Examples:</b> Eritrea.</p> <p><b>Metrics:</b> TI Index ~20–30; ~15% increase in public trust.</p>
<b>30–39</b>	Corruption is reduced through targeted reforms.	<p><b>30–33:</b> Major public scandals lead to symbolic but meaningful reforms.</p> <p><b>34–36:</b> Public services like utilities become less corrupt.</p> <p><b>37–39:</b> Prosecution of corruption increases public confidence.</p>	<p><b>Examples:</b> Mexico.</p> <p><b>Metrics:</b> TI Index ~30–40; public satisfaction with reforms ~40%.</p>

Continuation of the table

<b>40–49</b>	Moderate corruption with visible improvements.	<b>40–42:</b> Corruption reduces significantly in public services (e.g., licensing). <b>43–46:</b> Anti-corruption commissions begin producing tangible results. <b>47–49:</b> Government contracts become increasingly transparent.	<b>Examples:</b> Indonesia. <b>Metrics:</b> TI Index ~40–50; whistleblower reports increase ~25%.
<b>50–59</b>	Corruption is limited to isolated sectors.	<b>50–52:</b> Police and judiciary reforms drive significant reductions in bribery. <b>53–56:</b> Political corruption becomes rare; accountability strengthens. <b>57–59:</b> Anti-corruption campaigns reduce public mistrust dramatically.	<b>Examples:</b> Argentina. <b>Metrics:</b> TI Index ~50–60; >50% prosecution rates.
<b>60–69</b>	Corruption is rare and isolated.	<b>60–63:</b> Transparency measures extend across sectors. <b>64–66:</b> Corruption perceptions drop significantly in national surveys. <b>67–69:</b> Whistleblower protections and open governance bolster public trust.	<b>Examples:</b> South Korea. <b>Metrics:</b> TI Index ~60–70; bribery complaints <10%.
<b>70–79</b>	Government ranks as one of the least corrupt regionally.	<b>70–73:</b> Anti-corruption policies are integrated across institutions. <b>74–76:</b> Bribery is virtually eliminated in public services. <b>77–79:</b> Corruption is addressed swiftly, ensuring public trust.	<b>Examples:</b> Australia. <b>Metrics:</b> TI Index ~70–80; corruption perception <5%.
<b>80–89</b>	Negligible corruption.	<b>80–83:</b> Strong institutional frameworks ensure transparency. <b>84–86:</b> Regional benchmarks in integrity and accountability.	<b>Examples:</b> Sweden. <b>Metrics:</b> TI Index ~80–90;

*Continuation of the table*

		<b>87–89:</b> Corruption is eradicated in practice; proactive measures prevent new cases.	public trust >80%.
<b>90–100</b>	Corruption is virtually non-existent.	<b>90–93:</b> Institutions lead global anti-corruption initiatives. <b>94–96:</b> Governments implement preventative systems that adapt to emerging risks. <b>97–100:</b> Public trust is near-universal; global model for integrity.	<b>Examples:</b> Switzerland. <b>Metrics:</b> TI Index >90; ~95% public trust.

**5. Political Factors: Participation in Geopolitical Blocs**

<b>Score Range</b>	<b>Description</b>	<b>Clear Guidance for Finer Gradations</b>	<b>Examples and Metrics*</b>
<b>1–9</b>	Harmful alliances or total isolation.	<b>1–3:</b> Membership in blocs actively harms the country (e.g., punitive sanctions due to alliances). <b>4–6:</b> Country is a passive member of harmful alliances or excluded from major international frameworks. <b>7–9:</b> Limited engagement in alliances; isolationism hinders economic and diplomatic prospects.	<b>Examples:</b> North Korea. <b>Metrics:</b> Trade losses >50% due to bloc participation; no bilateral treaties with major nations.
<b>10–19</b>	Negative impact from alliances.	<b>10–12:</b> Alliances create internal divisions or geopolitical conflicts (e.g., opposition to bloc policies). <b>13–15:</b> Membership benefits elites or small sectors but harms broader economic/political interests. <b>16–19:</b> Political friction with key allies limits benefits; minimal international cooperation.	<b>Examples:</b> Venezuela. <b>Metrics:</b> Declining foreign investment by ~20% due to bloc obligations.

*Continuation of the table*

<b>20–29</b>	Neutral or minimally beneficial participation.	<p><b>20–22:</b> Membership provides limited economic or security benefits but little influence in bloc decisions.</p> <p><b>23–26:</b> Country is a peripheral member, rarely engaging in key initiatives.</p> <p><b>27–29:</b> Alliances bring minor improvements but fail to address critical national needs.</p>	<p><b>Examples:</b> Bhutan.</p> <p><b>Metrics:</b> Export growth &lt;5% linked to bloc benefits.</p>
<b>30–39</b>	Somewhat beneficial participation.	<p><b>30–33:</b> Alliances support narrow sectors (e.g., agriculture or energy) but lack broad impact.</p> <p><b>34–36:</b> Membership fosters limited economic growth and modest diplomatic gains.</p> <p><b>37–39:</b> Alliances improve stability but create dependency on stronger members.</p>	<p><b>Examples:</b> Albania.</p> <p><b>Metrics:</b> GDP growth ~2% from bloc-related trade; marginal increases in FDI.</p>
<b>40–49</b>	Modestly beneficial alliances.	<p><b>40–42:</b> Membership enhances trade opportunities and stabilizes certain industries.</p> <p><b>43–46:</b> Blocs offer security benefits but demand compromises on sovereignty.</p> <p><b>47–49:</b> Participation improves economic integration and trade flow but lacks innovation.</p>	<p><b>Examples:</b> India.</p> <p><b>Metrics:</b> Trade increases ~10%; security cooperation agreements expand.</p>
<b>50–59</b>	Alliances provide substantial benefits.	<p><b>50–52:</b> Membership leads to tariff reductions and diversified markets.</p> <p><b>53–56:</b> Country gains moderate influence in bloc decision-making processes.</p> <p><b>57–59:</b> Economic and political benefits outweigh potential sovereignty costs.</p>	<p><b>Examples:</b> Brazil.</p> <p><b>Metrics:</b> FDI growth ~15%; security index improves by 25%.</p>

*Continuation of the table*

<b>60–69</b>	Strongly beneficial alliances.	<p><b>60–63:</b> Membership fosters regional leadership and significant economic gains.</p> <p><b>64–66:</b> Alliances enhance diplomatic influence in global forums (e.g., UN, WTO).</p> <p><b>67–69:</b> Participation strengthens both trade and security sectors consistently.</p>	<p><b>Examples:</b> South Korea.</p> <p><b>Metrics:</b> Export growth ~20%; bloc-driven GDP growth ~3–4%.</p>
<b>70–79</b>	Alliances drive national growth.	<p><b>70–73:</b> Membership promotes strategic innovation and resilience across industries.</p> <p><b>74–76:</b> Diplomatic and economic policies align seamlessly with bloc objectives.</p> <p><b>77–79:</b> Country acts as a regional leader, setting agenda within alliances.</p>	<p><b>Examples:</b> Germany.</p> <p><b>Metrics:</b> Trade volume increases ~30%; bloc-related initiatives boost productivity by 10%.</p>
<b>80–89</b>	Membership is transformative.	<p><b>80–83:</b> Alliances position the country as a key player in regional economic and security frameworks.</p> <p><b>84–86:</b> Membership fosters global partnerships beyond the bloc.</p> <p><b>87–89:</b> Policies and reforms driven by alliance participation become models for others.</p>	<p><b>Examples:</b> Japan.</p> <p><b>Metrics:</b> GDP per capita growth &gt;4% annually due to bloc initiatives.</p>
<b>90–100</b>	Membership is exemplary.	<p><b>90–93:</b> Country leads innovative reforms within alliances and drives global standards.</p> <p><b>94–96:</b> Alliances provide unparalleled economic and security benefits; country gains substantial global influence.</p> <p><b>97–100:</b> Membership consistently achieves diplomatic, economic, and security excellence.</p>	<p><b>Examples:</b> United States.</p> <p><b>Metrics:</b> Export growth &gt;40%; global rankings in influence &gt;90th percentile.</p>

## Economic Factors

### 1. Economic Factors: Economic Performance

Score Range	Description	Clear Guidance for Finer Gradations	Examples and Metrics*
<b>1–9</b>	Collapsed or dysfunctional economy.	<b>1–3:</b> GDP shrinks annually; hyperinflation exceeds 500%. <b>4–6:</b> Severe instability, major industries cease operation. <b>7–9:</b> Minor recovery attempts fail; unemployment >50%.	<b>Examples:</b> Zimbabwe. <b>Metrics:</b> GDP growth <-5%; inflation >1000%.
<b>10–19</b>	Extremely weak economy.	<b>10–12:</b> GDP stagnates; industries operate below 30% capacity. <b>13–15:</b> Export activity resumes but faces significant barriers. <b>16–19:</b> Early-stage stabilization with minor international assistance.	<b>Examples:</b> Venezuela. <b>Metrics:</b> GDP growth ~0%; inflation 100–500%.
<b>20–29</b>	Weak economy with some recovery.	<b>20–22:</b> Inflation stabilizes but remains high; unemployment ~30%. <b>23–26:</b> Core industries restart but remain underproductive. <b>27–29:</b> GDP growth marginally positive (~1–2%).	<b>Examples:</b> Sudan. <b>Metrics:</b> Inflation ~30%; GDP growth 1–2%.
<b>30–39</b>	Recovering economy.	<b>30–33:</b> Trade activity increases; public debt remains high. <b>34–36:</b> Moderate improvements in fiscal stability. <b>37–39:</b> Sectors like technology or agriculture see isolated growth.	<b>Examples:</b> Argentina. <b>Metrics:</b> GDP growth ~3%; inflation ~20–30%.
<b>40–49</b>	Moderately weak economy.	<b>40–42:</b> Inflation stabilizes (<15%); GDP grows slowly (~2–3%). <b>43–46:</b> Diversification efforts improve sectoral balance. <b>47–49:</b> External debt declines, allowing modest recovery.	<b>Examples:</b> Brazil. <b>Metrics:</b> GDP growth ~3%; inflation ~10%.

*Continuation of the table*

<b>50–59</b>	Growing economy.	<b>50–52:</b> GDP growth accelerates (~4–5%); inflation <10%. <b>53–56:</b> Exports and imports re-balance; fiscal policy stabilizes. <b>57–59:</b> Private investment returns, boosting innovation.	<b>Examples:</b> India. <b>Metrics:</b> GDP growth 5%; FDI growth >15%.
<b>60–69</b>	Stable economy.	<b>60–63:</b> GDP grows ~5–6%; inflation ~5–7%. <b>64–66:</b> Diversification enhances resilience to global shocks. <b>67–69:</b> Growth is inclusive, reducing unemployment to ~5–7%.	<b>Examples:</b> Phillipines. <b>Metrics:</b> GDP growth ~6%; inflation ~5%.
<b>70–79</b>	Strong economy.	<b>70–73:</b> Consistent, robust growth (>6%); industries innovate. <b>74–76:</b> Investment in infrastructure drives sustainable gains. <b>77–79:</b> Resilience to global downturns improves dramatically.	<b>Examples:</b> Rwanda. <b>Metrics:</b> GDP growth ~7%; inflation ~3–4%.
<b>80–89</b>	Advanced economy.	<b>80–83:</b> Growth remains strong; government policies foster innovation. <b>84–86:</b> Trade surplus consistently supports development. <b>87–89:</b> Public and private sectors align for long-term gains.	<b>Examples:</b> Singapore. <b>Metrics:</b> GDP growth ~5%; inflation <3%.
<b>90–100</b>	World-class economy.	<b>90–93:</b> Economy sets global standards in innovation and resilience. <b>94–96:</b> Trade surplus exceeds expectations; economic policies serve as models. <b>97–100:</b> Unprecedented stability and growth; GDP per capita leads global rankings.	<b>Examples:</b> United States. <b>Metrics:</b> GDP growth >5%; inflation <2%.



## 2. Economic Factors: Economic Diversification

Score Range	Description	Clear Guidance for Finer Gradations	Examples and Metrics*
<b>1–9</b>	Mono-cultural economy; extreme vulnerability.	<b>1–3:</b> Economy relies entirely on one sector (e.g., >90% GDP from oil exports). <b>4–6:</b> Dependence on a single industry persists, with negligible investment in alternatives. <b>7–9:</b> Minimal diversification attempts fail to reduce vulnerability.	<b>Examples:</b> South Sudan. <b>Metrics:</b> >85% of exports from one product; negligible FDI in other sectors.
<b>10–19</b>	Heavy reliance on one or two sectors.	<b>10–12:</b> Small investments in other industries but no meaningful results. <b>13–15:</b> Secondary industries (e.g., agriculture) begin to contribute marginally. <b>16–19:</b> Early diversification in manufacturing or services, with minimal output.	<b>Examples:</b> Angola. <b>Metrics:</b> >70% export dependency on one sector; secondary industries <10% GDP.
<b>20–29</b>	Initial steps toward diversification.	<b>20–22:</b> Secondary industries grow but remain underdeveloped (<15% GDP). <b>23–26:</b> Trade reforms enable minor growth in emerging sectors. <b>27–29:</b> Tourism or services show early signs of sustainability.	<b>Examples:</b> Nigeria. <b>Metrics:</b> Non-primary sectors ~20% GDP; increased trade activity in 2–3 industries.
<b>30–39</b>	Moderate reliance on multiple sectors.	<b>30–33:</b> Manufacturing or services grow to ~25% GDP. <b>34–36:</b> New sectors face scalability challenges despite early successes. <b>37–39:</b> Significant progress in non-primary sectors, though dependency remains visible.	<b>Examples:</b> Kazakhstan. <b>Metrics:</b> Non-primary sectors ~30% GDP; exports diversified across ~5 products.

## Continuation of the table

<b>40–49</b>	Balanced diversification emerges.	<p><b>40–42:</b> Secondary and tertiary industries reach ~35% GDP.</p> <p><b>43–46:</b> Trade partners diversify, reducing risk of economic shocks.</p> <p><b>47–49:</b> Resource sectors dominate less than 50% of total exports.</p>	<p><b>Examples:</b> Indonesia.</p> <p><b>Metrics:</b> Non-resource sectors ~40% GDP; export diversity index improves by ~15%.</p>
<b>50–59</b>	Strong diversification across industries.	<p><b>50–52:</b> Manufacturing, tech, and services grow steadily (~45% GDP).</p> <p><b>53–56:</b> Exports increasingly include high-value-added products.</p> <p><b>57–59:</b> Multiple industries contribute equally to GDP growth.</p>	<p><b>Examples:</b> Mexico.</p> <p><b>Metrics:</b> Export share of high-tech products &gt;20%; non-resource sectors ~50% GDP.</p>
<b>60–69</b>	Highly diversified economy.	<p><b>60–63:</b> No sector dominates GDP (&gt;30% each); industries like tech, manufacturing, and tourism thrive.</p> <p><b>64–66:</b> Value-added exports drive global competitiveness.</p> <p><b>67–69:</b> Domestic policies incentivize continuous innovation in multiple sectors.</p>	<p><b>Examples:</b> Malaysia.</p> <p><b>Metrics:</b> High-tech exports ~30% of total; manufacturing ~25% GDP.</p>
<b>70–79</b>	Economic resilience through deep diversification.	<p><b>70–73:</b> Sectors are evenly balanced and mutually reinforcing.</p> <p><b>74–76:</b> Global partnerships expand market reach for all major industries.</p> <p><b>77–79:</b> Industrial policies ensure adaptability to global demand shifts.</p>	<p><b>Examples:</b> Germany.</p> <p><b>Metrics:</b> No sector &gt;25% GDP; tech exports dominate global markets.</p>
<b>80–89</b>	Benchmark-level diversification.	<p><b>80–83:</b> Country leads regionally in economic adaptability; highly diversified export products.</p>	<p><b>Examples:</b> Japan.</p>

Continuation of the table

		<b>84–86:</b> Key industries consistently innovate, outpacing regional competitors. <b>87–89:</b> Economic policies set benchmarks globally for resilience and innovation.	<b>Metrics:</b> Export diversity index >80%; GDP split evenly across 4+ sectors.
<b>90–100</b>	World-class economic diversification.	<b>90–93:</b> Country thrives on innovation across multiple sectors; global leader in key industries. <b>94–96:</b> Economy fully insulated from commodity price shocks. <b>97–100:</b> Exemplary industrial balance; diversification drives long-term growth globally.	<b>Examples:</b> United States. <b>Metrics:</b> High-tech exports >40%; GDP from manufacturing, finance, and services equally balanced.

### 3. Economic Factors: Income Inequality

Score Range	Description	Clear Guidance for Finer Gradations	Examples and Metrics*
<b>1–9</b>	Extreme inequality; systemic exclusion.	<b>1–3:</b> Gini coefficient >0.65; majority population lacks access to essential services. <b>4–6:</b> Middle class effectively non-existent; wealth concentrated among elites. <b>7–9:</b> Basic services (education, healthcare) are highly inequitable.	<b>Examples:</b> South Africa. <b>Metrics:</b> Gini >0.6; poverty rate >50%.
<b>10–19</b>	Severe inequality; limited mobility.	<b>10–12:</b> Marginalized groups see token inclusion in economic reforms. <b>13–15:</b> Middle class emerges but faces significant barriers to growth. <b>16–19:</b> Regional disparities dominate economic outcomes.	<b>Examples:</b> Brazil. <b>Metrics:</b> Gini ~0.55; ~40% population below poverty line.

*Continuation of the table*

<b>20–29</b>	High inequality with visible progress.	<b>20–22:</b> Subsidies reduce poverty in urban areas but not rural regions. <b>23–26:</b> Employment and education opportunities improve for low-income groups. <b>27–29:</b> Inequality narrows slightly as reforms take hold.	<b>Examples:</b> Mexico. <b>Metrics:</b> Gini ~0.5; literacy gap ~20% between regions.
<b>30–39</b>	Moderate inequality with early reforms.	<b>30–33:</b> Government introduces income redistribution programs (e.g., conditional cash transfers). <b>34–36:</b> Wealth gaps shrink across regions, though disparities remain visible. <b>37–39:</b> Access to healthcare and education improves across income groups.	<b>Examples:</b> China. <b>Metrics:</b> Gini ~0.45; poverty rate ~30%.
<b>40–49</b>	Inequality remains but significant progress made.	<b>40–42:</b> Affordable housing and healthcare policies target the lower-middle class. <b>43–46:</b> Job creation efforts stabilize incomes for marginalized populations. <b>47–49:</b> Reforms successfully boost social mobility.	<b>Examples:</b> India. <b>Metrics:</b> Gini ~0.4; poverty rate ~25%.
<b>50–59</b>	Moderate inequality; middle class expands.	<b>50–52:</b> Social welfare policies reduce intergenerational poverty. <b>53–56:</b> Education reforms improve opportunities for low-income groups. <b>57–59:</b> Labor market equality improves.	<b>Examples:</b> Turkey. <b>Metrics:</b> Gini ~0.35; poverty rate ~20%.
<b>60–69</b>	Low inequality; strong upward mobility.	<b>60–63:</b> Majority of the population enters the middle class. <b>64–66:</b> Equal access to high-quality healthcare and education. <b>67–69:</b> Regional disparities nearly eliminated.	<b>Examples:</b> South Korea. <b>Metrics:</b> Gini ~0.3; literacy ~95% nationwide.

Continuation of the table

<b>70–79</b>	Minimal inequality; social equity drives growth.	<b>70–73:</b> Income gaps shrink significantly; wealth redistribution is effective. <b>74–76:</b> Most citizens achieve economic security. <b>77–79:</b> Inclusive economic growth reinforces equity.	<b>Examples:</b> Germany. <b>Metrics:</b> Gini <0.3; poverty rate ~10%.
<b>80–89</b>	Benchmark-level equality.	<b>80–83:</b> Strong welfare state ensures equal opportunities. <b>84–86:</b> Redistribution policies consistently sustain equity. <b>87–89:</b> Government sets regional benchmarks for inclusivity.	<b>Examples:</b> Sweden. <b>Metrics:</b> Gini ~0.25; poverty rate <5%.
<b>90–100</b>	Exemplary equality; global leader in equity.	<b>90–93:</b> Universal access to resources eliminates economic disparities. <b>94–96:</b> Inclusive policies drive sustained equality across generations. <b>97–100:</b> Nation exemplifies fairness in economic outcomes globally.	<b>Examples:</b> Norway. <b>Metrics:</b> Gini <0.2; universal access to education and healthcare.

#### 4. Economic Factors: Unemployment Rates

Score Range	Description	Clear Guidance for Finer Gradations	Examples and Metrics*
<b>1–9</b>	Chronic unemployment (>20%).	<b>1–3:</b> Structural unemployment dominates all sectors. <b>4–6:</b> Marginal recovery efforts fail to reduce chronic joblessness. <b>7–9:</b> Seasonal employment offers limited relief.	<b>Examples:</b> South Africa. <b>Metrics:</b> Unemployment >25%; youth unemployment >40%.

## Continuation of the table

<b>10–19</b>	Very high unemployment (12–20%).	<b>10–12:</b> Policies fail to create jobs; most employment is informal. <b>13–15:</b> Sectors like construction offer minor opportunities. <b>16–19:</b> Slow job growth fails to outpace population growth.	<b>Examples:</b> Montenegro. <b>Metrics:</b> Unemployment ~18%; informal jobs >60%.
<b>20–29</b>	High unemployment (8–12%).	<b>20–22:</b> Government incentives create low-wage jobs. <b>23–26:</b> Urban unemployment falls, but rural areas suffer. <b>27–29:</b> Vocational training shows minor results.	<b>Examples:</b> Greece. <b>Metrics:</b> Unemployment ~10%; youth joblessness ~25%.
<b>30–39</b>	Moderate unemployment (5–8%).	<b>30–33:</b> Job creation focuses on urban centers. <b>34–36:</b> Workforce policies improve industrial job growth. <b>37–39:</b> Unemployment stabilizes but remains higher for marginalized groups.	<b>Examples:</b> Italy. <b>Metrics:</b> Unemployment ~7%; rural joblessness ~10%.
<b>40–49</b>	Low unemployment (3–5%).	<b>40–42:</b> Government policies support sustainable job growth. <b>43–46:</b> Employment programs target inclusivity. <b>47–49:</b> Majority of job-seekers secure work within six months.	<b>Examples:</b> Netherlands. <b>Metrics:</b> Unemployment ~4%; youth unemployment ~6%.
<b>50–59</b>	Very low unemployment (<3%).	<b>50–52:</b> Job markets stabilize; underemployment reduces. <b>53–56:</b> Economic policies support workforce development. <b>57–59:</b> Near-full employment achieved in key sectors.	<b>Examples:</b> South Korea. <b>Metrics:</b> Unemployment ~2.5%; youth joblessness ~3%.
<b>60–69</b>	Near-full employment.	<b>60–63:</b> Unemployment drops below 2%; temporary joblessness dominates. <b>64–66:</b> High workforce participation across all demographics. <b>67–69:</b> Economy absorbs displaced workers rapidly.	<b>Examples:</b> Singapore. <b>Metrics:</b> Unemployment ~1.5%; workforce participation ~90%.

Continuation of the table

<b>70–79</b>	Full employment with minimal gaps.	<b>70–73:</b> Sectors diversify, ensuring resilient job markets. <b>74–76:</b> Automation complements job growth. <b>77–79:</b> Workforce transitions seamlessly across industries.	<b>Examples:</b> Denmark. <b>Metrics:</b> Unemployment <1.5%; youth joblessness ~2%.
<b>80–89</b>	Exemplary employment rates.	<b>80–83:</b> Country achieves model employment balance globally. <b>84–86:</b> Workforce consistently innovates, ensuring adaptability. <b>87–89:</b> Job creation policies drive long-term growth and stability.	<b>Examples:</b> Cambodia. <b>Metrics:</b> Unemployment <1%; >95% workforce participation.
<b>90–100</b>	Global benchmark for employment.	<b>90–93:</b> No systemic unemployment; job markets remain resilient. <b>94–96:</b> Technological shifts create more jobs than they displace. <b>97–100:</b> Nation leads globally in job quality and availability.	<b>Examples:</b> Qatar. <b>Metrics:</b> Workforce participation ~98%; negligible unemployment (<0.5%).

## 5. Economic Factors: Ease of Doing Business

Score Range	Description	Clear Guidance for Finer Gradations	Examples and Metrics*
<b>1–9</b>	Prohibitive regulatory and business environment.	<b>1–3:</b> Extreme bureaucratic hurdles; no framework for business registration. <b>4–6:</b> Licensing processes are opaque, taking months or years. <b>7–9:</b> Limited access to finance or property rights; corruption dominates business processes.	<b>Examples:</b> Somalia. <b>Metrics:</b> World Bank Ease of Doing Business Score <30; average licensing time >200 days.

## Continuation of the table

<b>10–19</b>	Very challenging business environment.	<p><b>10–12:</b> Some business registration processes exist but are highly inefficient.</p> <p><b>13–15:</b> Property rights are weakly enforced, creating insecurity for businesses.</p> <p><b>16–19:</b> Infrastructure issues (e.g., power outages) severely hinder operations.</p>	<p><b>Examples:</b> Venezuela.</p> <p><b>Metrics:</b> Ease of Doing Business Score ~30–40; ~50% corruption-related delays in business approvals.</p>
<b>20–29</b>	Difficult environment with emerging reforms.	<p><b>20–22:</b> Minor improvements in licensing or property laws, but overall inefficiency persists.</p> <p><b>23–26:</b> Public-private partnerships improve isolated sectors (e.g., export logistics).</p> <p><b>27–29:</b> Early-stage anti-corruption reforms show limited impact.</p>	<p><b>Examples:</b> Nigeria.</p> <p><b>Metrics:</b> Ease of Doing Business Score ~40–50; power outage days &gt;20 per month.</p>
<b>30–39</b>	Moderately challenging environment.	<p><b>30–33:</b> Licensing times shorten but remain inconsistent.</p> <p><b>34–36:</b> Property laws are partially enforced; businesses gain confidence in select regions.</p> <p><b>37–39:</b> Infrastructure gaps persist but targeted reforms improve reliability in urban hubs.</p>	<p><b>Examples:</b> India.</p> <p><b>Metrics:</b> Licensing time ~60–100 days; reliable power in 30% of regions.</p>
<b>40–49</b>	Moderately favorable business environment.	<p><b>40–42:</b> Licensing and registration reforms cut processing times by ~30%.</p> <p><b>43–46:</b> Property rights are well-enforced in urban areas but weak in rural regions.</p> <p><b>47–49:</b> Infrastructure bottlenecks reduce but remain a concern.</p>	<p><b>Examples:</b> Brazil.</p> <p><b>Metrics:</b> Ease of Doing Business Score ~50–60; &gt;60% of businesses cite predictable regulations.</p>
<b>50–59</b>	Favorable business environment.	<p><b>50–52:</b> Licensing and registration processes are streamlined in major sectors.</p>	<p><b>Examples:</b> Mexico.</p>



*Continuation of the table*

		<p><b>53–56:</b> Property disputes reduce significantly; enforcement improves.</p> <p><b>57–59:</b> Basic infrastructure (e.g., electricity, transport) supports consistent business operations.</p>	<p><b>Metrics:</b> Licensing time ~30–50 days; Ease of Doing Business Score ~60–70.</p>
<b>60–69</b>	Business-friendly environment with regional leadership.	<p><b>60–63:</b> Regulations are transparent and predictable across most sectors.</p> <p><b>64–66:</b> Taxation systems support small and medium enterprises (SMEs).</p> <p><b>67–69:</b> Infrastructure enables steady growth in rural and urban areas.</p>	<p><b>Examples:</b> UAE.</p> <p><b>Metrics:</b> Ease of Doing Business Score ~70–80; licensing time &lt;30 days.</p>
<b>70–79</b>	Highly favorable environment.	<p><b>70–73:</b> Reforms attract foreign direct investment (FDI) consistently.</p> <p><b>74–76:</b> Businesses enjoy reliable infrastructure nationwide.</p> <p><b>77–79:</b> Legal protections and efficient courts support entrepreneurial growth.</p>	<p><b>Examples:</b> Denmark.</p> <p><b>Metrics:</b> Ease of Doing Business Score ~80–85; &gt;80% business confidence index.</p>
<b>80–89</b>	Globally competitive business environment.	<p><b>80–83:</b> Regulations align with international best practices, reducing trade barriers.</p> <p><b>84–86:</b> Infrastructure enables seamless operations across industries.</p> <p><b>87–89:</b> Strong property and contract enforcement attracts global firms.</p>	<p><b>Examples:</b> Singapore.</p> <p><b>Metrics:</b> Licensing time ~10 days; Ease of Doing Business Score ~90.</p>
<b>90–100</b>	Exemplary business environment.	<p><b>90–93:</b> Businesses thrive due to rapid licensing, transparent taxation, and consistent infrastructure.</p>	<p><b>Examples:</b> New Zealand.</p> <p><b>Metrics:</b> Ease of Doing Business Score</p>

Continuation of the table

		<b>94–96:</b> Country sets global benchmarks in trade efficiency and regulatory ease. <b>97–100:</b> Business environment is unparalleled, fostering innovation and FDI.	~95–100; <5 days for licensing approvals.
--	--	---	---

## Social Factors

### 1. Social Factors: Historical Stability

Score Range	Description	Clear Guidance for Finer Gradations	Examples and Metrics*
<b>1–9</b>	History of continuous instability.	<b>1–3:</b> Nation faces near-constant conflict with no periods of peace. <b>4–6:</b> Short-lived stability is repeatedly interrupted by coups or wars. <b>7–9:</b> Recent history includes fragile peace, but unrest persists in many regions.	<b>Examples:</b> Syria during civil war. <b>Metrics:</b> No stable government for >10 years; conflict-driven GDP loss >20%.
<b>10–19</b>	History of frequent conflicts and instability.	<b>10–12:</b> Conflict is episodic but devastates critical sectors (e.g., infrastructure). <b>13–15:</b> Power shifts occur regularly due to political instability or coups. <b>16–19:</b> Gradual stabilization emerges but is fragile and uneven.	<b>Examples:</b> South Sudan. <b>Metrics:</b> >5 major conflicts in 30 years; displacement >20% of population.
<b>20–29</b>	History of significant instability	<b>20–22:</b> Post-conflict recovery remains slow, with limited institutional stability. <b>23–26:</b> Peace-building efforts show moderate success.	<b>Examples:</b> Afghanistan under peace agreements.

*Continuation of the table*

	with visible recovery.	<b>27–29:</b> Periods of stability lengthen, reducing conflict recurrence.	<b>Metrics:</b> Conflict recurrence interval >5 years; GDP growth ~1–2%.
<b>30–39</b>	History of moderate instability.	<b>30–33:</b> Political power transitions are often contentious but rarely escalate to conflict. <b>34–36:</b> Governance stabilizes but remains vulnerable to external shocks. <b>37–39:</b> Significant improvements in institutional resilience emerge.	<b>Examples:</b> Colombia post-FARC agreements. <b>Metrics:</b> Peace maintained >10 years; GDP growth ~3–4%.
<b>40–49</b>	History of stability punctuated by occasional instability.	<b>40–42:</b> Political transitions are generally peaceful but lack inclusivity. <b>43–46:</b> Governance is stable but faces moderate corruption and inefficiencies. <b>47–49:</b> Nation experiences steady progress despite occasional instability.	<b>Examples:</b> India's post-independence journey. <b>Metrics:</b> Peace maintained >20 years; institutional trust ~50%.
<b>50–59</b>	History of moderate stability.	<b>50–52:</b> Institutions withstand political transitions without conflict. <b>53–56:</b> Governance becomes more inclusive and predictable. <b>57–59:</b> Economic growth accelerates, supported by stable institutions.	<b>Examples:</b> Indonesia post-Suharto reforms. <b>Metrics:</b> Peace maintained >25 years; GDP growth ~5%.
<b>60–69</b>	History of strong stability.	<b>60–63:</b> Peace spans multiple decades, with robust governance systems. <b>64–66:</b> Stable governance supports regional leadership.	<b>Examples:</b> Brazil post-democracy restoration.

## Continuation of the table

		<b>67–69:</b> Institutions are highly resilient to external shocks.	<b>Metrics:</b> Peace maintained >30 years; institutional trust ~70%.
<b>70–79</b>	History of remarkable stability.	<b>70–73:</b> Country acts as a stabilizing force regionally. <b>74–76:</b> Governance systems are highly predictable and inclusive. <b>77–79:</b> Stability fosters significant economic and social growth.	<b>Examples:</b> South Korea. <b>Metrics:</b> Peace maintained >50 years; GDP per capita growth >5%.
<b>80–89</b>	Benchmark-level historical stability.	<b>80–83:</b> Governance systems serve as regional models of stability. <b>84–86:</b> Stability enables long-term development planning. <b>87–89:</b> Institutions proactively adapt to prevent instability.	<b>Examples:</b> Canada. <b>Metrics:</b> Peace maintained >75 years; institutional trust ~85%.
<b>90–100</b>	World-class historical stability.	<b>90–93:</b> Institutions are globally renowned for stability. <b>94–96:</b> Nation exemplifies conflict prevention and governance resilience. <b>97–100:</b> Stability enables innovation and leadership globally.	<b>Examples:</b> Switzerland. <b>Metrics:</b> Peace maintained >100 years; institutional trust >90%.

## 2. Social Factors: Ethnic and Cultural Cohesion

Score Range	Description	Clear Guidance for Finer Gradations	Examples and Metrics*
<b>1–9</b>	Deep-seated ethnic and cultural	<b>1–3:</b> Ethnic violence dominates societal dynamics; no cohesion.	<b>Examples:</b> Myanmar during Rohingya crisis.

*Continuation of the table*

	conflicts.	<b>4–6:</b> Sporadic violence occurs; government lacks capacity to mediate conflicts. <b>7–9:</b> Minority groups face systemic exclusion and persecution.	<b>Metrics:</b> Ethnic violence incidents >100/year; minority trust <10%.
<b>10–19</b>	Significant ethnic tensions with sporadic conflict.	<b>10–12:</b> Inter-ethnic tensions remain high, with occasional violent outbreaks. <b>13–15:</b> Policies marginally improve minority representation. <b>16–19:</b> Conflict decreases, but deep distrust persists.	<b>Examples:</b> Iraq post-Saddam Hussein. <b>Metrics:</b> Violence incidents ~50/year; minority representation ~10%.
<b>20–29</b>	Visible progress in ethnic and cultural cohesion.	<b>20–22:</b> Reforms reduce overt violence but mistrust persists. <b>23–26:</b> Minorities gain marginal political representation. <b>27–29:</b> Cross-cultural cooperation emerges in urban areas.	<b>Examples:</b> South Africa post-apartheid. <b>Metrics:</b> Minority representation ~20%; inter-ethnic violence <30 incidents/year.
<b>30–39</b>	Moderate cohesion with lingering tensions.	<b>30–33:</b> Government mediates inter-group disputes effectively in most cases. <b>34–36:</b> Political and economic inclusion improves for marginalized groups. <b>37–39:</b> Rural and urban areas see distinct progress.	<b>Examples:</b> Kenya post-election violence reforms. <b>Metrics:</b> Minority representation ~30%; ethnic violence <20/year.
<b>40–49</b>	Significant cohesion achieved.	<b>40–42:</b> Reforms yield sustained reductions in tensions. <b>43–46:</b> Minorities actively participate in governance. <b>47–49:</b> Economic and social barriers between groups diminish.	<b>Examples:</b> Indonesia's multicultural governance. <b>Metrics:</b> Minority representation ~40%; public trust in unity policies ~50%.

*Continuation of the table*

<b>50–59</b>	Broad societal cohesion.	<p><b>50–52:</b> Government integrates minority perspectives into policymaking.</p> <p><b>53–56:</b> Inter-ethnic cooperation drives social progress.</p> <p><b>57–59:</b> Urban and rural areas both benefit from sustained cohesion.</p>	<p><b>Examples:</b> Malaysia's ethnic harmony efforts.</p> <p><b>Metrics:</b> Minority trust &gt;60%; ethnic violence incidents &lt;10/year.</p>
<b>60–69</b>	Strong cohesion with national unity.	<p><b>60–63:</b> Ethnic tensions are minimal, and unity fosters shared goals.</p> <p><b>64–66:</b> Cohesion enhances economic integration.</p> <p><b>67–69:</b> Cultural diversity is celebrated and leveraged for development.</p>	<p><b>Examples:</b> Singapore.</p> <p><b>Metrics:</b> Minority representation &gt;50%; public trust in unity policies ~70%.</p>
<b>70–79</b>	National model of cohesion.	<p><b>70–73:</b> Country serves as a regional example of integration.</p> <p><b>74–76:</b> Cross-cultural collaboration thrives in all sectors.</p> <p><b>77–79:</b> Ethnic and cultural differences enrich national identity.</p>	<p><b>Examples:</b> Canada.</p> <p><b>Metrics:</b> Minority trust &gt;80%; no recorded ethnic violence.</p>
<b>80–89</b>	Benchmark for global cohesion.	<p><b>80–83:</b> Policies set global examples for cultural integration.</p> <p><b>84–86:</b> Nation leads in multicultural representation.</p> <p><b>87–89:</b> Minorities and majorities enjoy equal opportunities.</p>	<p><b>Examples:</b> Switzerland.</p> <p><b>Metrics:</b> Public satisfaction with unity policies ~90%; representation in leadership &gt;20%.</p>
<b>90–100</b>	Exemplary global cohesion.	<p><b>90–93:</b> Nation fosters global initiatives for cultural harmony.</p> <p><b>94–96:</b> Institutions fully represent all groups equally.</p> <p><b>97–100:</b> Country is globally recognized as a model for diversity and cohesion.</p>	<p><b>Examples:</b> Finland.</p> <p><b>Metrics:</b> Minority trust &gt;95%; representation in leadership &gt;30%.</p>

### 3. Social Factors: Religious Influence

Score Range	Description	Clear Guidance for Finer Gradations	Examples and Metrics*
<b>1–9</b>	Religion dominates governance; severe restrictions on freedoms.	<b>1–3:</b> State-enforced religion dictates laws; persecution of minorities is systemic. <b>4–6:</b> Religious authorities supersede civil law; no tolerance for dissent. <b>7–9:</b> Laws are religiously mandated, with minorities facing severe penalties for non-compliance.	<b>Examples:</b> Taliban-controlled Afghanistan. <b>Metrics:</b> Religious Freedom Index ~0–10; non-majority group rights <5%.
<b>10–19</b>	Religion heavily influences governance; limited tolerance for diversity.	<b>10–12:</b> Minority groups face routine discrimination; religious laws regulate most public affairs. <b>13–15:</b> Some legal protections exist but are inconsistently applied. <b>16–19:</b> Religious dominance in rural areas, with urban areas showing mild pluralism.	<b>Examples:</b> Saudi Arabia. <b>Metrics:</b> Religious Freedom Index ~10–20; representation of minorities in leadership ~1–5%.
<b>20–29</b>	Religion plays a significant role but reforms emerge.	<b>20–22:</b> Government introduces mild secular reforms, but religious law remains dominant. <b>23–26:</b> Tolerance improves in urban areas; rural regions lag behind. <b>27–29:</b> Civil laws begin to balance religious influence.	<b>Examples:</b> Pakistan’s gradual secularization efforts. <b>Metrics:</b> Religious Freedom Index ~20–30; minority participation in governance ~10%.
<b>30–39</b>	Religion coexists with civil governance;	<b>30–33:</b> Laws are influenced by religion but include exemptions for minorities. <b>34–36:</b> Interfaith dialogue initiatives gain traction.	<b>Examples:</b> Indonesia’s Pancasila philosophy.

*Continuation of the table*

	limited conflicts.	<b>37–39:</b> Civil law prevails in most public matters, though religious influence persists socially.	<b>Metrics:</b> Religious Freedom Index ~30–40; minority participation ~15%.
<b>40–49</b>	Religious influence diminishes in public affairs.	<b>40–42:</b> Secular reforms ensure basic protections for all faiths. <b>43–46:</b> Religious conflicts decline, replaced by cultural collaboration. <b>47–49:</b> Religious and civil institutions operate independently.	<b>Examples:</b> Turkey pre-recent centralization. <b>Metrics:</b> Religious Freedom Index ~40–50; violence over religious issues <5 incidents/year.
<b>50–59</b>	Balance between religion and state governance.	<b>50–52:</b> Religion retains influence but does not dominate public life. <b>53–56:</b> Secular laws gain broad acceptance. <b>57–59:</b> Minorities are well-integrated and experience minimal discrimination.	<b>Examples:</b> Malaysia's multi-religious policies. <b>Metrics:</b> Religious Freedom Index ~50–60; minority participation ~25%.
<b>60–69</b>	Religion and governance are fully separated in practice.	<b>60–63:</b> Government policies actively protect religious freedoms. <b>64–66:</b> Religious influence is limited to social and cultural spheres. <b>67–69:</b> National policies consistently promote inclusivity.	<b>Examples:</b> South Korea. <b>Metrics:</b> Religious Freedom Index ~60–70; trust in inter-faith initiatives ~70%.
<b>70–79</b>	Nation exemplifies religious	<b>70–73:</b> Religious communities coexist harmoniously with active government support.	<b>Examples:</b> Canada. <b>Metrics:</b> Religious Freedom



Continuation of the table

	pluralism.	<b>74–76:</b> Policies encourage interfaith collaboration and dialogue. <b>77–79:</b> Country is a regional leader in religious tolerance.	Index ~70–80; minority representation ~30%.
<b>80–89</b>	Religious freedoms set global standards.	<b>80–83:</b> Tolerance policies are institutionalized and rarely challenged. <b>84–86:</b> Religious harmony becomes a cultural hallmark. <b>87–89:</b> Nation leads international initiatives for religious freedom.	<b>Examples:</b> Switzerland. <b>Metrics:</b> Religious Freedom Index ~80–90; trust in religious institutions >80%.
<b>90–100</b>	Global exemplar of religious freedom.	<b>90–93:</b> Religious and secular policies align to promote universal freedoms. <b>94–96:</b> Country actively mediates international religious conflicts. <b>97–100:</b> World-renowned for interfaith harmony and inclusivity.	<b>Examples:</b> Finland. <b>Metrics:</b> Religious Freedom Index >90; trust in interfaith programs ~95%.

## 4. Social Factors: Educational Attainment

Score Range	Description	Clear Guidance for Finer Gradations	Examples and Metrics*
<b>1–9</b>	Minimal education access; widespread illiteracy.	<b>1–3:</b> Literacy rates <20%; no formal education systems. <b>4–6:</b> Limited schools exist but are poorly funded and inaccessible to most. <b>7–9:</b> Basic education reaches only small urban populations; rural areas excluded.	<b>Examples:</b> Chad. <b>Metrics:</b> Literacy rate <20%; school enrollment <30%.

*Continuation of the table*

<b>10–19</b>	Severe disparities in education access.	<b>10–12:</b> Education access improves slightly in urban areas. <b>13–15:</b> Basic literacy campaigns reach marginalized groups but remain underfunded. <b>16–19:</b> Gender and regional disparities persist, limiting broad progress.	<b>Examples:</b> Afghanistan. <b>Metrics:</b> Literacy rate ~30%; gender gap >30% in school enrollment.
<b>20–29</b>	Early-stage improvements in educational access.	<b>20–22:</b> Public education reforms expand school coverage but with poor quality. <b>23–26:</b> Primary school attendance increases, but secondary and tertiary access remain limited. <b>27–29:</b> Rural-urban gaps narrow slightly.	<b>Examples:</b> Ethiopia's education reforms. <b>Metrics:</b> Literacy rate ~40%; primary school enrollment ~50%.
<b>30–39</b>	Moderate education access with visible progress.	<b>30–33:</b> Secondary education reforms begin addressing gaps. <b>34–36:</b> Vocational training initiatives gain traction. <b>37–39:</b> Basic education becomes accessible in most regions.	<b>Examples:</b> India's literacy campaigns. <b>Metrics:</b> Literacy rate ~50%; secondary school enrollment ~60%.
<b>40–49</b>	Education becomes widely accessible.	<b>40–42:</b> Primary education is universal; secondary reforms improve quality. <b>43–46:</b> Tertiary enrollment begins to rise steadily. <b>47–49:</b> Gaps between rural and urban access significantly diminish.	<b>Examples:</b> Indonesia's education expansion. <b>Metrics:</b> Literacy rate ~70%; tertiary enrollment ~20%.
<b>50–59</b>	Education quality improves broadly.	<b>50–52:</b> Teacher training programs enhance primary and secondary education. <b>53–56:</b> Vocational education gains strong public support.	<b>Examples:</b> Vietnam. <b>Metrics:</b> Literacy rate ~80%; tertiary

*Continuation of the table*

		<b>57–59:</b> Higher education participation doubles in underrepresented groups.	enrollment ~30%.
<b>60–69</b>	Education becomes a driver of development.	<b>60–63:</b> Higher education institutions gain international recognition. <b>64–66:</b> STEM education improves, addressing labor market demands. <b>67–69:</b> Regional education gaps are nearly eliminated.	<b>Examples:</b> Malaysia. <b>Metrics:</b> Literacy rate >90%; tertiary enrollment ~40%.
<b>70–79</b>	Education fuels innovation and equality.	<b>70–73:</b> Nation excels in global education rankings. <b>74–76:</b> Education access and quality are universally consistent. <b>77–79:</b> Economic growth is directly linked to education-driven innovation.	<b>Examples:</b> Poland. <b>Metrics:</b> Literacy rate >95%; tertiary enrollment ~50%.
<b>80–89</b>	Benchmark-level education system.	<b>80–83:</b> Public-private partnerships enhance tertiary education. <b>84–86:</b> Country consistently ranks among the top globally for education. <b>87–89:</b> Education outcomes drive sustained social and economic equity.	<b>Examples:</b> Finland. <b>Metrics:</b> Global education rankings in top 10; tertiary enrollment >60%.
<b>90–100</b>	Exemplary global education system.	<b>90–93:</b> Universal access to high-quality education across all levels. <b>94–96:</b> Country exports educational models globally. <b>97–100:</b> Education is fully aligned with innovation, equity, and global leadership.	<b>Examples:</b> Singapore. <b>Metrics:</b> Literacy rate ~100%; tertiary enrollment >70%.

## 5. Social Factors: Health and Pandemic Preparedness

Score Range	Description	Clear Guidance for Finer Gradations	Examples and Metrics*
<b>1–9</b>	Health system is near collapse.	<b>1–3:</b> Public health infrastructure is non-existent; no pandemic response capability. <b>4–6:</b> Majority of population lacks access to basic health-care. <b>7–9:</b> Sporadic healthcare availability in urban centers; rural areas ignored.	<b>Examples:</b> Yemen. <b>Metrics:</b> Life expectancy <50 years; vaccination rates <30%.
<b>10–19</b>	Severely inadequate health system.	<b>10–12:</b> Basic healthcare services exist but are heavily underfunded. <b>13–15:</b> Pandemic responses fail to contain outbreaks effectively. <b>16–19:</b> Maternal and infant mortality rates remain extremely high.	<b>Examples:</b> Chad. <b>Metrics:</b> Life expectancy ~55 years; maternal mortality >800/100,000 births.
<b>20–29</b>	Health system begins recovery.	<b>20–22:</b> Vaccination campaigns begin to address preventable diseases. <b>23–26:</b> Pandemic readiness improves slightly with international aid. <b>27–29:</b> Healthcare infrastructure expands slowly to rural areas.	<b>Examples:</b> Afghanistan. <b>Metrics:</b> Vaccination rates ~50%; life expectancy ~60 years.
<b>30–39</b>	Basic health infrastructure improves.	<b>30–33:</b> Clinics and hospitals expand coverage in urban centers. <b>34–36:</b> Government establishes pandemic monitoring systems. <b>37–39:</b> Health outcomes improve significantly in urban areas.	<b>Examples:</b> Kenya. <b>Metrics:</b> Life expectancy ~65 years; vaccination rates ~70%.

*Continuation of the table*

<b>40–49</b>	Mod-erately developed health system.	<b>40–42:</b> Public health campaigns reduce infectious disease rates. <b>43–46:</b> Pandemic responses prevent widespread outbreaks. <b>47–49:</b> Rural healthcare services expand steadily.	<b>Examples:</b> In- donesia. <b>Metrics:</b> Life expectancy ~70 years; vacci- nation rates ~80%.
<b>50–59</b>	Health system becomes resilient.	<b>50–52:</b> Universal access to pri- mary healthcare established. <b>53–56:</b> Pandemic response frameworks achieve regional effectiveness. <b>57–59:</b> Chronic disease man- agement programs expand.	<b>Examples:</b> Vietnam. <b>Metrics:</b> Life expectancy ~73 years; vacci- nation rates >85%.
<b>60–69</b>	Health system supports long-term develop- ment.	<b>60–63:</b> Hospitals achieve global accreditation. <b>64–66:</b> Pandemic readiness aligns with international stan- dards. <b>67–69:</b> Life expectancy rises significantly due to preventiva- tive care.	<b>Examples:</b> Malaysia. <b>Metrics:</b> Life expectancy ~75 years; vacci- nation rates >90%.
<b>70–79</b>	Advanced health system.	<b>70–73:</b> Universal healthcare is sustainable and efficient. <b>74–76:</b> Pandemic responses be- come globally exemplary. <b>77–79:</b> Life expectancy contin- ues to increase, with strong healthcare equity.	<b>Examples:</b> Po- land. <b>Metrics:</b> Life expectancy >77 years; vacci- nation rates >95%.
<b>80–89</b>	Bench- mark-level health system.	<b>80–83:</b> Country leads regional- ly in health outcomes and inno- vation. <b>84–86:</b> Pandemic readiness is unmatched regionally. <b>87–89:</b> Health system supports consistent population growth and stability.	<b>Examples:</b> Canada. <b>Metrics:</b> Life expectancy >80 years; vacci- nation rates >98%.

*Continuation of the table*

<b>90–100</b>	World-class health system.	<b>90–93:</b> Health system integrates cutting-edge technologies and universal coverage. <b>94–96:</b> Pandemic readiness is globally recognized as the best. <b>97–100:</b> Country sets global benchmarks in healthcare innovation and equity.	<b>Examples:</b> Singapore. <b>Metrics:</b> Life expectancy >85 years; vaccination rates >99%.
---------------	----------------------------	--	---

## Security Factors

### 1. Security Factors: Security Apparatus Effectiveness

<b>Score Range</b>	<b>Description</b>	<b>Clear Guidance for Finer Gradations</b>	<b>Examples and Metrics*</b>
<b>1–9</b>	Security forces actively contribute to instability.	<b>1–3:</b> Security forces are complicit in systemic violence and lawlessness. <b>4–6:</b> Armed groups dominate large territories, with little to no government presence. <b>7–9:</b> Security forces are corrupt and ineffective, leading to unchecked crime.	<b>Examples:</b> Somalia during civil war. <b>Metrics:</b> Crime rates >50% higher than regional average; state control <20% of territory.
<b>10–19</b>	Security forces are severely under-resourced and ineffective.	<b>10–12:</b> Police and military are incapable of addressing basic security threats. <b>13–15:</b> Corruption and inefficiency dominate most operations. <b>16–19:</b> Urban areas receive minimal security, while rural regions are entirely unprotected.	<b>Examples:</b> Haiti. <b>Metrics:</b> Crime rates >30%; public trust in police <20%.

Continuation of the table

<b>20–29</b>	Limited security capacity with emerging reforms.	<p><b>20–22:</b> Initial steps to rebuild security forces, but corruption persists.</p> <p><b>23–26:</b> Urban centers see marginal improvements; rural areas remain unsafe.</p> <p><b>27–29:</b> Security forces begin cooperating with international partners.</p>	<p><b>Examples:</b> Afghanistan post-international intervention.</p> <p><b>Metrics:</b> Police response rates &lt;50%; corruption complaints &gt;30%.</p>
<b>30–39</b>	Basic functionality in security forces.	<p><b>30–33:</b> Police handle low-level crimes but struggle with organized threats.</p> <p><b>34–36:</b> Military presence deters insurgency but is inconsistently effective.</p> <p><b>37–39:</b> Corruption reduces in urban regions; rural safety improves slightly.</p>	<p><b>Examples:</b> Kenya's reform efforts.</p> <p><b>Metrics:</b> Crime clearance rates ~40%; urban trust in police ~50%.</p>
<b>40–49</b>	Moderately effective security forces.	<p><b>40–42:</b> Public safety improves in major cities; rural areas still lag.</p> <p><b>43–46:</b> Specialized units (e.g., anti-terrorism forces) become operational.</p> <p><b>47–49:</b> Crime rates stabilize; community trust in policing increases.</p>	<p><b>Examples:</b> Nigeria post-Boko Haram reforms.</p> <p><b>Metrics:</b> Crime rates reduce by ~20%; trust in police &gt;60%.</p>
<b>50–59</b>	Reliable but uneven security apparatus.	<p><b>50–52:</b> Corruption significantly reduces; crime prevention improves.</p> <p><b>53–56:</b> Security forces gain public trust in urban and semi-urban areas.</p> <p><b>57–59:</b> Coordination between police and judiciary strengthens enforcement.</p>	<p><b>Examples:</b> Indonesia's anti-corruption drives.</p> <p><b>Metrics:</b> Crime clearance rates ~60%; trust in police ~70%.</p>

*Continuation of the table*

<b>60–69</b>	Security forces maintain public order effectively.	<b>60–63:</b> Crime rates are controlled across most regions. <b>64–66:</b> Security training improves professionalism. <b>67–69:</b> Rural areas benefit from stable policing.	<b>Examples:</b> Malaysia. <b>Metrics:</b> Crime clearance rates ~75%; trust in police >80%.
<b>70–79</b>	Security apparatus becomes a regional benchmark.	<b>70–73:</b> Security forces are proactive and well-trained. <b>74–76:</b> Crime rates are consistently low; organized crime is marginalized. <b>77–79:</b> Public safety is universally ensured.	<b>Examples:</b> Poland. <b>Metrics:</b> Crime rates <10%; trust in police >85%.
<b>80–89</b>	Exemplary security forces with strong public trust.	<b>80–83:</b> Security institutions operate transparently and are globally respected. <b>84–86:</b> Crime is rare and well-managed. <b>87–89:</b> Advanced technologies enhance security capabilities.	<b>Examples:</b> Germany. <b>Metrics:</b> Crime clearance rates >90%; public trust ~90%.
<b>90–100</b>	Global standard for security effectiveness.	<b>90–93:</b> Security forces set international benchmarks for efficiency and equity. <b>94–96:</b> Strong collaboration with international agencies enhances global safety. <b>97–100:</b> Crime is almost nonexistent, with universal public trust.	<b>Examples:</b> Finland. <b>Metrics:</b> Crime rates <5%; trust in police >95%.



## 2. Security Factors: Terrorism and Insurgency Threats

Score Range	Description	Clear Guidance for Finer Gradations	Examples and Metrics*
<b>1–9</b>	Wide-spread terrorism with no effective counter-measures.	<b>1–3:</b> Terrorism dominates all regions; government control is negligible. <b>4–6:</b> Regular large-scale attacks destabilize the economy and society. <b>7–9:</b> Sporadic attacks occur with no significant response from security forces.	<b>Examples:</b> Syria during ISIS control. <b>Metrics:</b> Terrorism Index ~9–10; fatalities >10,000/year.
<b>10–19</b>	Persistent and organized terrorism with limited containment.	<b>10–12:</b> Major urban areas frequently targeted; rural regions under insurgent control. <b>13–15:</b> Counterterrorism strategies are poorly coordinated and under-resourced. <b>16–19:</b> Sporadic progress in urban centers; rural areas remain vulnerable.	<b>Examples:</b> Nigeria during peak Boko Haram activity. <b>Metrics:</b> Terrorism Index ~8–9; fatalities ~5,000/year.
<b>20–29</b>	Terrorism significantly disrupts development but begins to recede.	<b>20–22:</b> Security forces regain limited control over key urban areas. <b>23–26:</b> Attacks reduce in frequency but remain a major threat. <b>27–29:</b> Insurgents lose territorial control, but sporadic violence persists.	<b>Examples:</b> Pakistan post-Swat Valley offensive. <b>Metrics:</b> Terrorism Index ~7; fatalities ~1,000/year.
<b>30–39</b>	Moderate terrorism threats with effective containment.	<b>30–33:</b> Urban areas stabilize, but rural insurgencies persist. <b>34–36:</b> Attacks are rare but still disrupt regional progress. <b>37–39:</b> Counterterrorism programs gain public support and international aid.	<b>Examples:</b> Kenya post-Westgate attack. <b>Metrics:</b> Terrorism Index ~6; fatalities ~500/year.

*Continuation of the table*

<b>40–49</b>	Isolated terrorism threats with decreasing influence.	<b>40–42:</b> Major attacks become rare and isolated. <b>43–46:</b> Security measures improve, leading to reduced recruitment of insurgents. <b>47–49:</b> Rural regions stabilize as insurgencies weaken.	<b>Examples:</b> Colombia post-FARC agreements. <b>Metrics:</b> Terrorism Index ~5; fatalities <100/year.
<b>50–59</b>	Low terrorism threats with strong counter-measures.	<b>50–52:</b> Domestic terrorism is largely eliminated. <b>53–56:</b> International cooperation strengthens counterterrorism. <b>57–59:</b> Society begins to heal from the effects of past terrorism.	<b>Examples:</b> Indonesia. <b>Metrics:</b> Terrorism Index ~4; fatalities <50/year.
<b>60–69</b>	Minimal terrorism threats.	<b>60–63:</b> Counterterrorism strategies are consistently successful. <b>64–66:</b> International travel and tourism recover fully. <b>67–69:</b> Terrorist recruitment is negligible.	<b>Examples:</b> Morocco. <b>Metrics:</b> Terrorism Index ~3; fatalities ~10/year.
<b>70–79</b>	Terrorism is rare and well-managed.	<b>70–73:</b> Nation leads regional counterterrorism initiatives. <b>74–76:</b> Public trust in safety is high across all regions. <b>77–79:</b> No significant domestic terror threats exist.	<b>Examples:</b> Poland. <b>Metrics:</b> Terrorism Index ~2; fatalities <5/year.
<b>80–89</b>	Benchmark-level counterterrorism and stability.	<b>80–83:</b> Counterterrorism policies are proactive and internationally recognized. <b>84–86:</b> International cooperation prevents cross-border threats. <b>87–89:</b> Security forces innovate in counterinsurgency.	<b>Examples:</b> Germany. <b>Metrics:</b> Terrorism Index ~1; no domestic fatalities.

*Continuation of the table*

<b>90–100</b>	Global standard in counter-terrorism.	<b>90–93:</b> Zero tolerance for terrorism; strategies serve as international models. <b>94–96:</b> Nation leads global counterterrorism coalitions. <b>97–100:</b> No domestic or cross-border terrorism threats.	<b>Examples:</b> Finland. <b>Metrics:</b> Terrorism Index ~0; trust in counterterrorism policies >95%.
---------------	---------------------------------------	--	---

### 3. Security Factors: External Intervention

Score Range	Description	Clear Guidance for Finer Gradations	Examples and Metrics*
<b>1–9</b>	Nation under foreign occupation or proxy wars.	<b>1–3:</b> Total loss of sovereignty; foreign powers dominate. <b>4–6:</b> Proxy wars lead to constant instability. <b>7–9:</b> Foreign forces control key regions or resources.	<b>Examples:</b> Yemen during civil war. <b>Metrics:</b> Sovereignty Index <10%; foreign troops dominate >50% of the territory.
<b>10–19</b>	Heavy external influence compromises sovereignty.	<b>10–12:</b> Foreign military bases significantly influence domestic policy. <b>13–15:</b> Foreign aid is used as leverage for political gain. <b>16–19:</b> Sovereignty is maintained in name but not in practice.	<b>Examples:</b> Iraq post-2003 invasion. <b>Metrics:</b> Sovereignty Index ~20%; foreign control of key resources.
<b>20–29</b>	Limited sovereignty with moderate external	<b>20–22:</b> Foreign interventions shape policy in major sectors. <b>23–26:</b> National institutions regain partial independence.	<b>Examples:</b> Afghanistan under international assistance.

*Continuation of the table*

	control.	<b>27–29:</b> Foreign influence diminishes but remains significant.	<b>Metrics:</b> Sovereignty Index ~30%; military aid constitutes >20% of GDP.
<b>30–39</b>	Gradual reduction of foreign influence.	<b>30–33:</b> National security regains control over domestic affairs. <b>34–36:</b> Foreign aid supports development without dictating policies. <b>37–39:</b> Military and political independence strengthen.	<b>Examples:</b> Kosovo post-UN mission. <b>Metrics:</b> Sovereignty Index ~40%; foreign aid <10% of GDP.
<b>40–49</b>	Moderate independence with isolated external ties.	<b>40–42:</b> Foreign influence focuses on collaborative development. <b>43–46:</b> Military independence becomes reliable. <b>47–49:</b> Nation achieves autonomy in policymaking.	<b>Examples:</b> Rwanda post-reconstruction. <b>Metrics:</b> Sovereignty Index ~50%; foreign troop presence <5%.
<b>50–59</b>	Nation achieves strong sovereignty with strategic alliances.	<b>50–52:</b> External relations are balanced and cooperative. <b>53–56:</b> Foreign aid focuses on mutual benefit. <b>57–59:</b> Nation actively shapes foreign policy independently.	<b>Examples:</b> Indonesia post-Suharto era. <b>Metrics:</b> Sovereignty Index ~60%; military autonomy ~90%.
<b>60–69</b>	Sovereignty is robust with collaborative diplomacy.	<b>60–63:</b> External partnerships enhance security without dependence. <b>64–66:</b> Foreign investments align with national priorities. <b>67–69:</b> Nation leads regional security cooperation.	<b>Examples:</b> Malaysia. <b>Metrics:</b> Sovereignty Index ~70%; FDI with no major political strings.

*Continuation of the table*

<b>70–79</b>	Nation is a regional leader in sovereignty.	<b>70–73:</b> Diplomatic relations prioritize mutual benefit. <b>74–76:</b> Military and political independence strengthen alliances. <b>77–79:</b> External powers respect domestic policies fully.	<b>Examples:</b> Poland. <b>Metrics:</b> Sovereignty Index ~80%; no foreign troop presence.
<b>80–89</b>	Benchmark-level sovereignty with global partnerships.	<b>80–83:</b> Foreign aid is purely developmental. <b>84–86:</b> Nation mediates regional disputes as a neutral party. <b>87–89:</b> Security is domestically managed with global cooperation.	<b>Examples:</b> Germany. <b>Metrics:</b> Sovereignty Index ~90%; diplomatic influence exceeds regional average.
<b>90–100</b>	Exemplary sovereignty and independence.	<b>90–93:</b> Nation is globally respected for its independence and diplomacy. <b>94–96:</b> Foreign partnerships are entirely voluntary and equal. <b>97–100:</b> Nation defines global standards in sovereignty and collaboration.	<b>Examples:</b> Finland. <b>Metrics:</b> Sovereignty Index ~100%; trust in foreign policy ~95%.

## Environmental Factors

### 1. Environmental Factors: Climate Change Vulnerability

Score Range	Description	Clear Guidance for Finer Gradations	Examples and Metrics*
<b>1–9</b>	Extremely high vulnerability;	<b>1–3:</b> Country faces severe climate risks (e.g., rising sea levels, extreme droughts) with no mitigation plans.	<b>Examples:</b> Somalia. <b>Metrics:</b> Climate Risk Index

*Continuation of the table*

	no adaptation measures.	<b>4–6:</b> Critical industries (e.g., agriculture) are collapsing due to climate impacts. <b>7–9:</b> Limited international aid fails to address systemic vulnerabilities.	>50; agricultural GDP losses >50%.
<b>10–19</b>	High vulnerability with minimal adaptation.	<b>10–12:</b> Limited local initiatives fail to reduce risks to infrastructure or livelihoods. <b>13–15:</b> Major economic sectors remain exposed to frequent climate events. <b>16–19:</b> International aid supports piecemeal adaptation, but systemic vulnerabilities persist.	<b>Examples:</b> Bangladesh (flood-prone regions). <b>Metrics:</b> Climate Risk Index ~40–50; >30% of population in high-risk zones.
<b>20–29</b>	Significant vulnerability with early-stage adaptation.	<b>20–22:</b> Government implements pilot programs for climate resilience. <b>23–26:</b> Isolated industries (e.g., tourism) adapt to climate risks, but broader efforts lag. <b>27–29:</b> Regional collaborations begin addressing shared vulnerabilities.	<b>Examples:</b> Nepal. <b>Metrics:</b> Climate Risk Index ~30–40; agricultural GDP losses ~20%.
<b>30–39</b>	Moderate vulnerability with visible progress in adaptation.	<b>30–33:</b> Infrastructure projects reduce risks in urban areas but fail to cover rural regions. <b>34–36:</b> Climate change impacts on food security lessen due to targeted reforms. <b>37–39:</b> Early warning systems reduce mortality from extreme weather.	<b>Examples:</b> Vietnam. <b>Metrics:</b> Climate Risk Index ~25–30; reduction in weather-related fatalities ~30%.
<b>40–49</b>	Moderate vulnerability with effective	<b>40–42:</b> National policies reduce climate risks in key industries.	<b>Examples:</b> Indonesia. <b>Metrics:</b> Climate Risk Index

*Continuation of the table*

	adaptation.	<b>43–46:</b> Infrastructure improvements mitigate long-term climate threats. <b>47–49:</b> Government secures international support for large-scale adaptation projects.	~20–25; >50% coverage of climate-resilient infrastructure.
<b>50–59</b>	Low vulnerability due to proactive adaptation measures.	<b>50–52:</b> Public-private partnerships address climate resilience in critical sectors. <b>53–56:</b> Early mitigation policies ensure long-term sustainability. <b>57–59:</b> Vulnerable populations are integrated into national adaptation strategies.	<b>Examples:</b> Morocco. <b>Metrics:</b> Climate Risk Index ~15–20; urban climate resilience ~70%.
<b>60–69</b>	Climate-resilient country with minimal risks.	<b>60–63:</b> Nation leads regional climate mitigation initiatives. <b>64–66:</b> Urban and rural areas benefit equally from resilient infrastructure. <b>67–69:</b> Cross-sectoral integration of climate policies strengthens economic stability.	<b>Examples:</b> South Korea. <b>Metrics:</b> Climate Risk Index ~10–15; >80% of population covered by risk-reducing measures.
<b>70–79</b>	Regional benchmark for climate adaptation.	<b>70–73:</b> Advanced technologies reduce climate risks significantly. <b>74–76:</b> National policies align with global best practices. <b>77–79:</b> Ecosystem restoration programs enhance long-term sustainability.	<b>Examples:</b> Germany. <b>Metrics:</b> Climate Risk Index ~5–10; annual economic losses <1% GDP.
<b>80–89</b>	Global leader in climate resilience.	<b>80–83:</b> Country pioneers innovative climate adaptation strategies. <b>84–86:</b> Climate policies drive economic innovation.	<b>Examples:</b> Finland. <b>Metrics:</b> Climate Risk Index ~2–5; >90% population with

*Continuation of the table*

		<b>87–89:</b> International collaborations elevate the country as a model for adaptation.	climate risk coverage.
<b>90–100</b>	World-class climate resilience.	<b>90–93:</b> Climate risks are negligible; adaptation strategies are world-renowned. <b>94–96:</b> Nation shapes global climate policies. <b>97–100:</b> Climate adaptation is seamlessly integrated into all aspects of governance.	<b>Examples:</b> Singapore. <b>Metrics:</b> Climate Risk Index ~0–2; zero weather-related fatalities annually.

## 2. Environmental Factors: Natural Disaster Risk

Score Range	Description	Clear Guidance for Finer Gradations	Examples and Metrics*
<b>1–9</b>	Constant, severe natural disasters with no response systems.	<b>1–3:</b> Natural disasters devastate critical infrastructure yearly; no preparedness plans exist. <b>4–6:</b> Mortality rates from disasters are extremely high due to weak governance. <b>7–9:</b> Humanitarian aid is the primary disaster response mechanism.	<b>Examples:</b> Haiti during major earthquakes. <b>Metrics:</b> Annual disaster-related fatalities >10,000; economic losses >20% GDP.



*Continuation of the table*

<b>10–19</b>	Frequent disasters with inadequate response capabilities.	<b>10–12:</b> Disaster-prone regions lack basic warning systems. <b>13–15:</b> Recovery efforts are delayed due to poor coordination. <b>16–19:</b> National policies exist but are inconsistently implemented.	<b>Examples:</b> Philippines (frequent typhoons). <b>Metrics:</b> Disaster-related fatalities ~5,000/year; disaster recovery time >2 years.
<b>20–29</b>	High disaster risks with emerging mitigation efforts.	<b>20–22:</b> Pilot programs reduce vulnerability in urban centers. <b>23–26:</b> Early warning systems are deployed but cover limited regions. <b>27–29:</b> Government secures international aid for disaster resilience.	<b>Examples:</b> Nepal post-2015 earthquake. <b>Metrics:</b> Disaster-related fatalities ~1,000/year; urban infrastructure resilience ~30%.
<b>30–39</b>	Moderate risks with expanding disaster response systems.	<b>30–33:</b> Urban areas see improved disaster recovery timelines. <b>34–36:</b> National disaster response teams become operational. <b>37–39:</b> Community-based disaster preparedness programs grow.	<b>Examples:</b> Bangladesh. <b>Metrics:</b> Disaster-related fatalities ~500/year; disaster recovery time ~1 year.
<b>40–49</b>	Moderate risks with effective disaster response systems.	<b>40–42:</b> Public infrastructure withstands moderate disasters. <b>43–46:</b> Early warning systems reduce casualties significantly. <b>47–49:</b> International aid is less critical for recovery efforts.	<b>Examples:</b> Indonesia. <b>Metrics:</b> Disaster-related fatalities <500/year; infrastructure resilience >50%.

*Continuation of the table*

<b>50–59</b>	Low disaster risks with robust response frameworks.	<b>50–52:</b> Government policies integrate disaster preparedness into urban planning. <b>53–56:</b> Mortality rates from disasters are minimal. <b>57–59:</b> Response teams ensure rapid recovery nationwide.	<b>Examples:</b> Vietnam. <b>Metrics:</b> Disaster-related fatalities <200/year; disaster recovery time <6 months.
<b>60–69</b>	Resilient nation with minimal disaster risks.	<b>60–63:</b> Advanced technologies enhance early detection systems. <b>64–66:</b> Disaster recovery times are among the fastest regionally. <b>67–69:</b> National policies emphasize prevention over response.	<b>Examples:</b> Malaysia. <b>Metrics:</b> Disaster-related fatalities <100/year; recovery time <3 months.
<b>70–79</b>	Regional benchmark for disaster management.	<b>70–73:</b> Urban planning incorporates disaster prevention thoroughly. <b>74–76:</b> Private sector actively participates in mitigation. <b>77–79:</b> Country leads regional collaborations for disaster resilience.	<b>Examples:</b> Poland. <b>Metrics:</b> Disaster-related fatalities <50/year; >75% resilience infrastructure.
<b>80–89</b>	Global leader in disaster resilience.	<b>80–83:</b> Disaster-related economic losses are negligible. <b>84–86:</b> Country pioneers innovative disaster mitigation strategies. <b>87–89:</b> Regional neighbors adopt the nation's disaster management frameworks.	<b>Examples:</b> Germany. <b>Metrics:</b> Disaster-related fatalities ~10/year; infrastructure resilience ~90%.
<b>90–100</b>	World-class disaster	<b>90–93:</b> Nation is globally recognized for disaster prevention and response.	<b>Examples:</b> Japan. <b>Metrics:</b> Disaster-related

*Continuation of the table*

	prepared-ness and resilience.	<b>94–96:</b> Economic activity is unaffected by natural disasters. <b>97–100:</b> International best practices in disaster resilience originate here.	fatalities ~0; infrastructure resilience >95%.
--	-------------------------------	---	--

### 3. Environmental Factors: Resource Scarcity

Score Range	Description	Clear Guidance for Finer Gradations	Examples and Metrics*
<b>1–9</b>	Critical shortages of essential resources.	<b>1–3:</b> Nation faces extreme water and food scarcity; conflicts over resources dominate. <b>4–6:</b> Essential resources are unavailable to >50% of the population. <b>7–9:</b> Government is unable to secure sustainable resource access.	<b>Examples:</b> Yemen. <b>Metrics:</b> Water access ~20%; food insecurity >50%.
<b>10–19</b>	Severe resource scarcity with no long-term solutions.	<b>10–12:</b> Droughts or resource conflicts frequently disrupt livelihoods. <b>13–15:</b> Government relies entirely on international aid for essential supplies. <b>16–19:</b> Resource access improves marginally in urban areas; rural regions remain vulnerable.	<b>Examples:</b> Somalia. <b>Metrics:</b> Water access ~30%; food insecurity ~40%.
<b>20–29</b>	Significant scarcity with emerging resource	<b>20–22:</b> Pilot programs improve resource access in limited regions. <b>23–26:</b> Government begins long-term resource planning.	<b>Examples:</b> Afghanistan. <b>Metrics:</b> Water access ~40%;

## Continuation of the table

	strategies.	<b>27–29:</b> Resource conflicts decline slightly but remain a concern.	food insecurity ~30%.
<b>30–39</b>	Moderate scarcity with visible improvements.	<b>30–33:</b> Public-private partnerships address resource shortages. <b>34–36:</b> Infrastructure investments improve resource distribution. <b>37–39:</b> Urban areas achieve stable access; rural areas lag.	<b>Examples:</b> Ethiopia. <b>Metrics:</b> Water access ~50%; food insecurity ~20%.
<b>40–49</b>	Moderate resource access with minimal scarcity.	<b>40–42:</b> Government policies reduce resource gaps significantly. <b>43–46:</b> Rural and urban areas see equitable improvements in access. <b>47–49:</b> International collaboration bolsters sustainability.	<b>Examples:</b> Kenya. <b>Metrics:</b> Water access ~60%; food insecurity ~10%.
<b>50–59</b>	Low resource scarcity with resilient systems.	<b>50–52:</b> Nation achieves stable water and food supplies for most regions. <b>53–56:</b> Long-term investments ensure sustainability. <b>57–59:</b> Resource scarcity is limited to isolated incidents.	<b>Examples:</b> Vietnam. <b>Metrics:</b> Water access ~70%; negligible food insecurity.
<b>60–69</b>	Resource abundance with proactive management.	<b>60–63:</b> Resource access supports economic growth. <b>64–66:</b> Efficient resource management minimizes waste. <b>67–69:</b> Resource scarcity is not a factor in national planning.	<b>Examples:</b> Malaysia. <b>Metrics:</b> Water access ~80%; food security ~95%.
<b>70–79</b>	Regional benchmark for resource	<b>70–73:</b> Resources are managed efficiently and sustainably. <b>74–76:</b> National policies align with global sustainability goals.	<b>Examples:</b> South Korea. <b>Metrics:</b> Water access ~90%; food security

Continuation of the table

	sustainability.	<b>77–79:</b> Country aids resource-scarce neighbors.	~98%.
<b>80–89</b>	Global leader in resource abundance and management.	<b>80–83:</b> Resource efficiency drives exports and innovation. <b>84–86:</b> Nation shapes regional resource-sharing initiatives. <b>87–89:</b> Policies ensure zero resource wastage.	<b>Examples:</b> Germany. <b>Metrics:</b> Water access >95%; food security >99%.
<b>90–100</b>	Exemplary resource abundance and sustainability.	<b>90–93:</b> Resources support unparalleled economic growth and stability. <b>94–96:</b> Nation's resource policies set global benchmarks. <b>97–100:</b> Complete sustainability ensures indefinite resource abundance.	<b>Examples:</b> Finland. <b>Metrics:</b> Water access ~100%; food security ~100%.

## Information Factors

### 1. Information Factors: Media Freedom

Score Range	Description	Clear Guidance for Finer Gradations	Examples and Metrics*
<b>1–9</b>	Total state control; no independent media.	<b>1–3:</b> Media is fully state-owned; dissent is criminalized. <b>4–6:</b> Journalists face routine imprisonment or violence; no freedom of expression. <b>7–9:</b> Propaganda dominates, with no credible news sources.	<b>Examples:</b> North Korea. <b>Metrics:</b> Press Freedom Index ~0–10; independent media coverage ~0%.
<b>10–19</b>	Extreme censorship with rare independent voices.	<b>10–12:</b> Strict state control over major media outlets; minor outlets operate clandestinely. <b>13–15:</b> Limited access to international news; high self-censorship.	<b>Examples:</b> Eritrea. <b>Metrics:</b> Press Freedom Index ~10–20; media

*Continuation of the table*

		<b>16–19:</b> Few independent journalists operate under constant threat.	plurality ~5%.
<b>20–29</b>	High censorship with limited independent media.	<b>20–22:</b> Independent outlets exist but are frequently harassed. <b>23–26:</b> State influence dominates public discourse; major outlets are heavily censored. <b>27–29:</b> Access to international media is restricted in rural areas.	<b>Examples:</b> China. <b>Metrics:</b> Press Freedom Index ~20–30; independent outlets ~10%.
<b>30–39</b>	Moderate censorship with increasing media pluralism.	<b>30–33:</b> Independent media expands in urban areas but remains under pressure. <b>34–36:</b> State narratives dominate, but alternative views gain traction. <b>37–39:</b> Digital platforms provide limited uncensored news.	<b>Examples:</b> Russia. <b>Metrics:</b> Press Freedom Index ~30–40; media plurality ~20%.
<b>40–49</b>	Moderate freedom with occasional state interference.	<b>40–42:</b> Journalistic protections exist but are inconsistently applied. <b>43–46:</b> State narratives influence national outlets, but diverse voices persist. <b>47–49:</b> International media operates freely with occasional restrictions.	<b>Examples:</b> Turkey. <b>Metrics:</b> Press Freedom Index ~40–50; independent media coverage ~30%.
<b>50–59</b>	Significant freedom with limited censorship.	<b>50–52:</b> Journalists report freely but face occasional political backlash. <b>53–56:</b> Access to diverse news sources is widespread. <b>57–59:</b> Legal frameworks increasingly protect press freedom.	<b>Examples:</b> India. <b>Metrics:</b> Press Freedom Index ~50–60; media plurality ~40%.

*Continuation of the table*

<b>60–69</b>	Broad media freedom with minimal state interference.	<b>60–63:</b> Journalists operate freely, with strong legal protections. <b>64–66:</b> Media ownership is diverse and independent. <b>67–69:</b> Investigative journalism thrives with minimal risk.	<b>Examples:</b> South Korea. <b>Metrics:</b> Press Freedom Index ~60–70; independent outlets ~60%.
<b>70–79</b>	National benchmark for media freedom.	<b>70–73:</b> Media outlets are fully independent, with robust safeguards against censorship. <b>74–76:</b> Public trust in media remains high. <b>77–79:</b> Media diversity fosters public debate and accountability.	<b>Examples:</b> Poland. <b>Metrics:</b> Press Freedom Index ~70–80; public trust in media ~75%.
<b>80–89</b>	Global leader in press freedom.	<b>80–83:</b> Journalistic protections are comprehensive and proactive. <b>84–86:</b> Media plurality ensures balanced coverage. <b>87–89:</b> Publicly funded media enhances quality and independence.	<b>Examples:</b> Germany. <b>Metrics:</b> Press Freedom Index ~80–90; public trust in media ~85%.
<b>90–100</b>	World-class media freedom.	<b>90–93:</b> Media operates independently with near-universal trust. <b>94–96:</b> Country sets global standards for press freedom. <b>97–100:</b> Media strengthens democracy and governance globally.	<b>Examples:</b> Finland. <b>Metrics:</b> Press Freedom Index >90; media plurality ~95%.

## 2. Information Factors: Misinformation and Information Warfare

Score Range	Description	Clear Guidance for Finer Gradations	Examples and Metrics*
<b>1–9</b>	Toxic information environment; misinformation dominates.	<b>1–3:</b> State and private actors extensively use disinformation for manipulation. <b>4–6:</b> Public trust in information sources is near zero. <b>7–9:</b> Misinformation campaigns actively incite violence or destabilization.	<b>Examples:</b> Myanmar (Rohingya misinformation). <b>Metrics:</b> Public trust in media <10%; prevalence of misinformation ~90%.
<b>10–19</b>	Severe misinformation with limited counter-measures.	<b>10–12:</b> Major news outlets amplify propaganda or fake news. <b>13–15:</b> Digital platforms are exploited for disinformation campaigns. <b>16–19:</b> Public awareness campaigns are ineffective against misinformation.	<b>Examples:</b> Russia. <b>Metrics:</b> Public trust in news ~15%; misinformation incidents ~80%.
<b>20–29</b>	High misinformation with emerging counter-efforts.	<b>20–22:</b> Government acknowledges misinformation issues but lacks cohesive strategy. <b>23–26:</b> Digital literacy programs reduce susceptibility to fake news. <b>27–29:</b> Independent fact-checking organizations gain traction.	<b>Examples:</b> India. <b>Metrics:</b> Public trust in news ~20%; misinformation incidents ~70%.
<b>30–39</b>	Moderate misinformation with visible	<b>30–33:</b> Social media companies collaborate with governments to reduce fake news. <b>34–36:</b> Fact-checking initiatives expand nationally.	<b>Examples:</b> Kenya. <b>Metrics:</b> Public trust in news ~30%; misinformation



*Continuation of the table*

	progress in mitigation.	<b>37–39:</b> Misinformation remains impactful in rural areas but declines in urban centers.	incidents ~60%.
<b>40–49</b>	Moderate misinformation with effective counter-measures.	<b>40–42:</b> Legislation against disinformation achieves initial success. <b>43–46:</b> Public awareness campaigns lead to increased digital literacy. <b>47–49:</b> Misinformation becomes a fringe issue in major cities.	<b>Examples:</b> Brazil. <b>Metrics:</b> Public trust in news ~40%; misinformation incidents ~50%.
<b>50–59</b>	Low misinformation; strong public resilience.	<b>50–52:</b> Fact-checking organizations are integrated into mainstream media. <b>53–56:</b> Educational reforms address misinformation at early stages. <b>57–59:</b> Government policies balance free speech and disinformation regulation effectively.	<b>Examples:</b> Malaysia. <b>Metrics:</b> Public trust in news ~50%; misinformation incidents ~40%.
<b>60–69</b>	Minimal misinformation; society is digitally resilient.	<b>60–63:</b> Public awareness and trust in verified sources increase substantially. <b>64–66:</b> Technology companies develop AI tools to prevent disinformation. <b>67–69:</b> Nation leads regionally in combating digital propaganda.	<b>Examples:</b> South Korea. <b>Metrics:</b> Public trust in news ~60%; misinformation incidents ~30%.
<b>70–79</b>	Regional leader in combating misinformation.	<b>70–73:</b> Legal frameworks set standards for regional misinformation policies. <b>74–76:</b> Public discourse focuses on accountability rather than reactionary measures.	<b>Examples:</b> Poland. <b>Metrics:</b> Public trust in news ~70%; misinformation

## Continuation of the table

		<b>77–79:</b> Misinformation incidents are rare and quickly debunked.	incidents ~20%.
<b>80–89</b>	Global leader in misinformation prevention.	<b>80–83:</b> Society exhibits near-universal trust in verified information. <b>84–86:</b> International collaborations enhance global resilience to disinformation. <b>87–89:</b> Education and technology ensure long-term public immunity to fake news.	<b>Examples:</b> Germany. <b>Metrics:</b> Public trust in news ~85%; misinformation incidents ~10%.
<b>90–100</b>	Exemplary global misinformation resilience.	<b>90–93:</b> Nation shapes international norms for combating disinformation. <b>94–96:</b> Technology innovation eliminates most disinformation campaigns. <b>97–100:</b> Society achieves near-complete immunity to misinformation.	<b>Examples:</b> Finland. <b>Metrics:</b> Public trust in news >90%; misinformation incidents ~0%.

### 3. Information Factors: Social Media Influence

Score Range	Description	Clear Guidance for Finer Gradations	Examples and Metrics*
<b>1–9</b>	Social media exacerbates societal instability.	<b>1–3:</b> Platforms are used extensively for inciting violence and extremism. <b>4–6:</b> Fake accounts dominate discussions; public discourse is highly toxic. <b>7–9:</b> Social media platforms operate without oversight, amplifying disinformation.	<b>Examples:</b> Myanmar (Rohingya crisis). <b>Metrics:</b> Social Media Toxicity Index ~90%; trust in platforms ~10%.

Continuation of the table

<b>10–19</b>	Social media contributes to significant social tensions.	<b>10–12:</b> Hate speech and disinformation campaigns proliferate unchecked. <b>13–15:</b> Platforms attempt moderation but fail to address core issues. <b>16–19:</b> Public trust in social media begins to erode.	<b>Examples:</b> India. <b>Metrics:</b> Social Media Toxicity Index ~80%; trust in platforms ~15%.
<b>20–29</b>	Social media creates challenges but sees initial reforms.	<b>20–22:</b> Governments partner with platforms for limited moderation efforts. <b>23–26:</b> Educational campaigns highlight safe social media use. <b>27–29:</b> Toxic content begins to decline in urban areas.	<b>Examples:</b> Kenya. <b>Metrics:</b> Social Media Toxicity Index ~70%; trust in platforms ~25%.
<b>30–39</b>	Social media becomes a balanced tool for communication.	<b>30–33:</b> Moderation efforts succeed in curbing major toxic trends. <b>34–36:</b> Digital literacy campaigns reduce susceptibility to fake news. <b>37–39:</b> Platforms introduce transparency tools, gaining public trust.	<b>Examples:</b> Brazil. <b>Metrics:</b> Social Media Toxicity Index ~60%; trust in platforms ~35%.
<b>40–49</b>	Social media strengthens public discourse with limitations.	<b>40–42:</b> Harmful content is rare and promptly addressed. <b>43–46:</b> Platforms align with national regulations for user safety. <b>47–49:</b> Social media fosters productive debates in urban and semi-urban regions.	<b>Examples:</b> Indonesia. <b>Metrics:</b> Social Media Toxicity Index ~50%; trust in platforms ~50%.
<b>50–59</b>	Social media becomes a reliable platform	<b>50–52:</b> AI-driven moderation significantly improves user experience. <b>53–56:</b> Public trust grows as harmful content declines.	<b>Examples:</b> Malaysia. <b>Metrics:</b> Social Media Toxicity

*Continuation of the table*

	for engagement.	<b>57–59:</b> Platforms enhance their role in civic engagement.	Index ~40%; trust in platforms ~60%.
<b>60–69</b>	Social media fosters societal growth and innovation.	<b>60–63:</b> Platforms actively promote education and civic participation. <b>64–66:</b> Governments and platforms collaborate effectively for transparency. <b>67–69:</b> Social media strengthens social cohesion and innovation.	<b>Examples:</b> South Korea. <b>Metrics:</b> Social Media Toxicity Index ~30%; trust in platforms ~70%.
<b>70–79</b>	Regional leader in social media innovation.	<b>70–73:</b> Platforms set regional standards for ethical operations. <b>74–76:</b> Public trust in social media reaches high levels. <b>77–79:</b> Platforms drive cultural and economic growth.	<b>Examples:</b> UAE. <b>Metrics:</b> Social Media Toxicity Index ~20%; trust in platforms ~80%.
<b>80–89</b>	Global leader in ethical social media practices.	<b>80–83:</b> Platforms align fully with societal values and norms. <b>84–86:</b> Social media enables global cooperation and innovation. <b>87–89:</b> Public discourse is enriched by social media contributions.	<b>Examples:</b> Germany. <b>Metrics:</b> Social Media Toxicity Index ~10%; trust in platforms ~90%.
<b>90–100</b>	World-class social media influence.	<b>90–93:</b> Platforms integrate seamlessly into social and economic development. <b>94–96:</b> Nation defines global standards for ethical social media use. <b>97–100:</b> Public trust in platforms is nearly universal.	<b>Examples:</b> Finland. <b>Metrics:</b> Social Media Toxicity Index ~0%; trust in platforms ~95%.

## Technological Factors

### 1. Technological Factors: Technological Infrastructure

Score Range	Description	Clear Guidance for Finer Gradations	Examples and Metrics*
<b>1–9</b>	Virtually no technological infrastructure.	<b>1–3:</b> Internet and electricity are inaccessible to the majority. <b>4–6:</b> Urban areas have intermittent connectivity; rural areas are entirely offline. <b>7–9:</b> Critical sectors (e.g., healthcare) lack basic technological tools.	<b>Examples:</b> Chad. <b>Metrics:</b> Internet penetration <5%; mobile subscriptions <10 per 100 people.
<b>10–19</b>	Extremely limited infrastructure with minor advancements.	<b>10–12:</b> Basic telecommunications infrastructure exists in urban centers. <b>13–15:</b> Mobile networks are operational but unreliable. <b>16–19:</b> Initial investment in broadband infrastructure begins.	<b>Examples:</b> Afghanistan. <b>Metrics:</b> Internet penetration ~10%; mobile subscriptions ~20 per 100 people.
<b>20–29</b>	Limited infrastructure with emerging improvements.	<b>20–22:</b> Urban areas see increasing access to 3G/4G networks; rural regions remain disconnected. <b>23–26:</b> Public-private partnerships fund basic technology expansion. <b>27–29:</b> Key sectors adopt limited technological tools.	<b>Examples:</b> Sudan. <b>Metrics:</b> Internet penetration ~20%; mobile subscriptions ~30 per 100 people.
<b>30–39</b>	Moderate infrastructure with noticeable gaps.	<b>30–33:</b> Broadband access expands to secondary cities. <b>34–36:</b> Government implements early-stage digital policies. <b>37–39:</b> Key industries adopt technological solutions inconsistently.	<b>Examples:</b> Nigeria. <b>Metrics:</b> Internet penetration ~30%; mobile subscriptions ~50 per 100 people.

*Continuation of the table*

<b>40–49</b>	Moderate infrastructure with increasing integration.	<p><b>40–42:</b> Internet access is stable in urban areas; rural areas see incremental progress.</p> <p><b>43–46:</b> Policies focus on expanding broadband penetration.</p> <p><b>47–49:</b> Key sectors (e.g., education, healthcare) integrate digital tools steadily.</p>	<p><b>Examples:</b> Indonesia.</p> <p><b>Metrics:</b> Internet penetration ~40%; broadband subscriptions ~30 per 100 people.</p>
<b>50–59</b>	Reliable infrastructure supporting urban growth.	<p><b>50–52:</b> Internet access is widespread in cities; rural regions catch up.</p> <p><b>53–56:</b> Government digital policies drive e-governance.</p> <p><b>57–59:</b> Businesses adopt advanced digital tools.</p>	<p><b>Examples:</b> Vietnam.</p> <p><b>Metrics:</b> Internet penetration ~50%; mobile broadband subscriptions ~40 per 100 people.</p>
<b>60–69</b>	Well-developed infrastructure supporting regional leadership.	<p><b>60–63:</b> High-speed internet is widely available in urban and semi-urban areas.</p> <p><b>64–66:</b> Government policies support tech startups and digital transformation.</p> <p><b>67–69:</b> Key industries (e.g., manufacturing) adopt cutting-edge technologies.</p>	<p><b>Examples:</b> Malaysia.</p> <p><b>Metrics:</b> Internet penetration ~70%; mobile broadband subscriptions ~60 per 100 people.</p>
<b>70–79</b>	Regional benchmark for infrastructure.	<p><b>70–73:</b> Nation leads in regional technology adoption and innovation.</p> <p><b>74–76:</b> Public-private initiatives ensure near-universal internet access.</p> <p><b>77–79:</b> Technological infrastructure drives economic growth.</p>	<p><b>Examples:</b> Poland.</p> <p><b>Metrics:</b> Internet penetration ~80%; broadband speed &gt;50 Mbps.</p>
<b>80–89</b>	Global leader in technological	<b>80–83:</b> Near-universal access to high-speed broadband.	<b>Examples:</b> Germany.

Continuation of the table

	infrastructure.	<b>84–86:</b> Advanced technologies (e.g., 5G, IoT) support key industries. <b>87–89:</b> Infrastructure supports sustained innovation and growth.	<b>Metrics:</b> Internet penetration ~90%; broadband speed >100 Mbps.
<b>90–100</b>	World-class technological infrastructure.	<b>90–93:</b> Seamless integration of cutting-edge technologies across all sectors. <b>94–96:</b> Digital transformation drives societal and economic innovation. <b>97–100:</b> Infrastructure sets global benchmarks for speed, reliability, and accessibility.	<b>Examples:</b> South Korea. <b>Metrics:</b> Internet penetration ~100%; broadband speed >150 Mbps.

## 2. Technological Factors: Cybersecurity Preparedness

Score Range	Description	Clear Guidance for Finer Gradations	Examples and Metrics*
<b>1–9</b>	Virtually no cybersecurity measures; critical vulnerabilities.	<b>1–3:</b> Cyberattacks routinely disrupt public and private systems. <b>4–6:</b> Critical infrastructure lacks basic protection; data breaches are common. <b>7–9:</b> Government has no framework for cybersecurity.	<b>Examples:</b> Somalia. <b>Metrics:</b> Global Cybersecurity Index (GCI) <10; cyber-attack losses >5% GDP.
<b>10–19</b>	Minimal cybersecurity measures with frequent disruptions.	<b>10–12:</b> Limited cybersecurity policies fail to prevent major incidents. <b>13–15:</b> Private sectors initiate isolated protective measures. <b>16–19:</b> Government begins drafting cybersecurity frameworks.	<b>Examples:</b> Afghanistan. <b>Metrics:</b> GCI ~10–20; data breach incidents ~50/year.

*Continuation of the table*

<b>20–29</b>	Basic cybersecurity efforts with significant gaps.	<p><b>20–22:</b> Early-stage regulatory frameworks target public sector systems.</p> <p><b>23–26:</b> Isolated industries implement cybersecurity best practices.</p> <p><b>27–29:</b> Government partners with international organizations for capacity building.</p>	<p><b>Examples:</b> Nigeria.</p> <p><b>Metrics:</b> GCI ~20–30; cyber-attack losses ~3% GDP.</p>
<b>30–39</b>	Moderate cybersecurity measures with expanding capabilities.	<p><b>30–33:</b> Cybercrime task forces address domestic threats.</p> <p><b>34–36:</b> Public awareness campaigns reduce phishing and fraud.</p> <p><b>37–39:</b> Key sectors (e.g., finance) achieve basic cybersecurity compliance.</p>	<p><b>Examples:</b> Kenya.</p> <p><b>Metrics:</b> GCI ~30–40; cyberattack incidents ~100/year.</p>
<b>40–49</b>	Reliable cybersecurity measures with coordinated efforts.	<p><b>40–42:</b> Government implements cybersecurity policies nationwide.</p> <p><b>43–46:</b> Private-public partnerships strengthen critical infrastructure protection.</p> <p><b>47–49:</b> Businesses adopt standardized cybersecurity protocols.</p>	<p><b>Examples:</b> Indonesia.</p> <p><b>Metrics:</b> GCI ~40–50; cyber-attack losses &lt;2% GDP.</p>
<b>50–59</b>	Advanced cybersecurity measures in urban centers.	<p><b>50–52:</b> Cybercrime rates decline due to effective enforcement.</p> <p><b>53–56:</b> International collaborations enhance national capabilities.</p> <p><b>57–59:</b> E-governance systems achieve high-security standards.</p>	<p><b>Examples:</b> Vietnam.</p> <p><b>Metrics:</b> GCI ~50–60; cyberattack incidents ~50/year.</p>
<b>60–69</b>	Robust national cybersecurity framework.	<p><b>60–63:</b> Cybersecurity laws align with international best practices.</p>	<p><b>Examples:</b> Malaysia.</p> <p><b>Metrics:</b> GCI ~60–70;</p>



*Continuation of the table*

		<p><b>64–66:</b> Digital sectors adopt advanced threat detection systems.</p> <p><b>67–69:</b> Nation leads regionally in cybersecurity innovation.</p>	<p>data breach incidents &lt;10/year.</p>
<b>70–79</b>	Regional benchmark for cybersecurity.	<p><b>70–73:</b> Cybersecurity training programs strengthen workforce capabilities.</p> <p><b>74–76:</b> Businesses use AI-driven cybersecurity tools.</p> <p><b>77–79:</b> Country prevents significant cyberattacks consistently.</p>	<p><b>Examples:</b> Poland.</p> <p><b>Metrics:</b> GCI ~70–80; no critical infrastructure breaches.</p>
<b>80–89</b>	Global leader in cybersecurity.	<p><b>80–83:</b> Nation actively prevents cross-border cybercrime.</p> <p><b>84–86:</b> AI and blockchain solutions enhance cybersecurity resilience.</p> <p><b>87–89:</b> Private sector innovations drive global cybersecurity standards.</p>	<p><b>Examples:</b> Germany.</p> <p><b>Metrics:</b> GCI ~80–90; negligible cybercrime losses.</p>
<b>90–100</b>	World-class cybersecurity readiness.	<p><b>90–93:</b> Cybersecurity strategies integrate seamlessly across sectors.</p> <p><b>94–96:</b> Nation leads international coalitions for cybersecurity.</p> <p><b>97–100:</b> Country is virtually immune to cyberattacks.</p>	<p><b>Examples:</b> South Korea.</p> <p><b>Metrics:</b> GCI ~95–100; cybercrime losses &lt;0.1% GDP.</p>

### 3. Technological Factors: Digital Divide

Score Range	Description	Clear Guidance for Finer Gradations	Examples and Metrics*
<b>1–9</b>	Deep digital divide; most population lacks access.	<b>1–3:</b> Internet and technology access is a luxury, restricted to elites. <b>4–6:</b> Urban areas see minimal connectivity; rural areas are entirely offline. <b>7–9:</b> Gender and income disparities exacerbate access gaps.	<b>Examples:</b> Chad. <b>Metrics:</b> Internet penetration <10%; gender tech gap ~50%.
<b>10–19</b>	Severe digital divide with emerging access points.	<b>10–12:</b> Government pilots limited initiatives to expand connectivity. <b>13–15:</b> Mobile technology reaches urban elites but excludes marginalized groups. <b>16–19:</b> Urban-rural divide shows minor improvements.	<b>Examples:</b> Afghanistan. <b>Metrics:</b> Internet penetration ~20%; mobile ownership gap ~40%.
<b>20–29</b>	Significant divide with visible efforts to close gaps.	<b>20–22:</b> Public-private partnerships expand basic connectivity to rural areas. <b>23–26:</b> Marginalized groups gain access to mobile and internet technologies. <b>27–29:</b> Schools and hospitals adopt limited digital solutions.	<b>Examples:</b> Nigeria. <b>Metrics:</b> Internet penetration ~30%; gender gap ~30%.
<b>30–39</b>	Moderate divide with steady progress.	<b>30–33:</b> Urban-rural access gap narrows through targeted programs. <b>34–36:</b> Low-cost devices improve affordability. <b>37–39:</b> Government subsidies enhance access for vulnerable populations.	<b>Examples:</b> Kenya. <b>Metrics:</b> Internet penetration ~40%; rural connectivity ~25%.

*Continuation of the table*

<b>40–49</b>	Manageable divide with near-universal access in urban areas.	<b>40–42:</b> Affordable technology reduces access barriers. <b>43–46:</b> Public policies focus on equitable digital inclusion. <b>47–49:</b> Connectivity gaps in rural regions persist but decline steadily.	<b>Examples:</b> Indonesia. <b>Metrics:</b> Internet penetration ~50%; rural connectivity ~40%.
<b>50–59</b>	Minimal divide with widespread connectivity.	<b>50–52:</b> Urban and semi-urban areas achieve near-universal access. <b>53–56:</b> Rural areas see rapid technological adoption. <b>57–59:</b> Schools and businesses fully integrate digital tools.	<b>Examples:</b> Vietnam. <b>Metrics:</b> Internet penetration ~60%; rural connectivity ~50%.
<b>60–69</b>	Narrow divide with robust inclusion strategies.	<b>60–63:</b> Digital infrastructure supports remote areas effectively. <b>64–66:</b> Gender and income access gaps are negligible. <b>67–69:</b> Nation leads regionally in digital inclusivity.	<b>Examples:</b> Malaysia. <b>Metrics:</b> Internet penetration ~70%; rural connectivity ~60%.
<b>70–79</b>	Regional leader in digital equity.	<b>70–73:</b> Public and private sectors ensure equitable access. <b>74–76:</b> Connectivity drives social and economic inclusion. <b>77–79:</b> Digital literacy programs ensure effective use of technology.	<b>Examples:</b> Poland. <b>Metrics:</b> Internet penetration ~80%; rural connectivity ~75%.
<b>80–89</b>	Global leader in bridging the digital divide.	<b>80–83:</b> Universal access with minimal disparities. <b>84–86:</b> Digital technologies drive social equality. <b>87–89:</b> Nation exports digital inclusion models globally.	<b>Examples:</b> Germany. <b>Metrics:</b> Internet penetration ~90%; gender gap <5%.

## Continuation of the table

<b>90–100</b>	Exemplary digital inclusivity.	<b>90–93:</b> Entire population has seamless access to technology. <b>94–96:</b> Digital equity enhances all aspects of development. <b>97–100:</b> Nation sets global standards for digital inclusion.	<b>Examples:</b> South Korea. <b>Metrics:</b> Internet penetration ~100%; rural connectivity ~95%.
---------------	--------------------------------	---	---

## Demographic Factors

## 1. Demographic Factors: Population Growth Rate

<b>Score Range</b>	<b>Description</b>	<b>Clear Guidance for Finer Gradations</b>	<b>Examples and Metrics*</b>
<b>1–9</b>	Population growth is unsustainable and destabilizing.	<b>1–3:</b> Growth exceeds infrastructure and resource capacity, leading to widespread shortages. <b>4–6:</b> Fertility rates remain excessively high, with no family planning measures. <b>7–9:</b> Rapid growth causes mass unemployment and strains on healthcare and education.	<b>Examples:</b> Niger. <b>Metrics:</b> Population growth >4% annually; urban slums >50% of population.
<b>10–19</b>	Very high growth with emerging mitigation efforts.	<b>10–12:</b> Government struggles to implement basic family planning policies. <b>13–15:</b> Fertility rates begin to decline slightly in urban areas. <b>16–19:</b> Economic opportunities fail to match population growth.	<b>Examples:</b> Somalia. <b>Metrics:</b> Population growth ~3.5%; fertility rate ~5 children per woman.

*Continuation of the table*

<b>20–29</b>	High growth with visible demographic transitions.	<b>20–22:</b> Education reforms begin to lower fertility rates. <b>23–26:</b> Urban areas adapt moderately to growth pressures. <b>27–29:</b> Growth starts to align with basic resource availability.	<b>Examples:</b> Ethiopia. <b>Metrics:</b> Population growth ~3%; urban infrastructure development ~25%.
<b>30–39</b>	Moderate growth with improving resource alignment.	<b>30–33:</b> National strategies reduce growth pressures on urban infrastructure. <b>34–36:</b> Fertility rates decline significantly with improved healthcare. <b>37–39:</b> Growth stabilizes in some regions but remains a challenge elsewhere.	<b>Examples:</b> Kenya. <b>Metrics:</b> Population growth ~2.5%; fertility rate ~4 children per woman.
<b>40–49</b>	Balanced growth in most regions.	<b>40–42:</b> Fertility rates fall below 3 in urban areas. <b>43–46:</b> Infrastructure and resources align with population needs. <b>47–49:</b> Government policies encourage balanced growth across regions.	<b>Examples:</b> Indonesia. <b>Metrics:</b> Population growth ~2%; fertility rate ~3 children per woman.
<b>50–59</b>	Sustainable growth with minimal strain on resources.	<b>50–52:</b> Healthcare and education improvements stabilize growth rates. <b>53–56:</b> Rural-to-urban migration is effectively managed. <b>57–59:</b> Growth fuels economic opportunities without overwhelming resources.	<b>Examples:</b> Vietnam. <b>Metrics:</b> Population growth ~1.8%; fertility rate ~2.5 children per woman.

*Continuation of the table*

<b>60–69</b>	Growth closely matches economic and resource capacity.	<p><b>60–63:</b> Population policies align with sustainable development goals.</p> <p><b>64–66:</b> Urban and rural growth are balanced through equitable resource allocation.</p> <p><b>67–69:</b> Growth enhances long-term stability and economic expansion.</p>	<p><b>Examples:</b> Malaysia.</p> <p><b>Metrics:</b> Population growth ~1.5%; fertility rate ~2 children per woman.</p>
<b>70–79</b>	Low growth rates ensure long-term sustainability.	<p><b>70–73:</b> Fertility rates stabilize at replacement levels.</p> <p><b>74–76:</b> Urban and rural areas both thrive economically.</p> <p><b>77–79:</b> Growth supports innovation and economic diversification.</p>	<p><b>Examples:</b> Poland.</p> <p><b>Metrics:</b> Population growth ~1%; fertility rate ~2 children per woman.</p>
<b>80–89</b>	Near-zero growth with long-term demographic stability.	<p><b>80–83:</b> Replacement-level fertility sustains population size.</p> <p><b>84–86:</b> High productivity offsets low growth rates.</p> <p><b>87–89:</b> Long-term stability enhances global competitiveness.</p>	<p><b>Examples:</b> Germany.</p> <p><b>Metrics:</b> Population growth ~0.5%; fertility rate ~1.9 children per woman.</p>
<b>90–100</b>	World-class demographic balance.	<p><b>90–93:</b> Population growth is fully sustainable, with negligible strain.</p> <p><b>94–96:</b> Nation leads global benchmarks in population-resource alignment.</p> <p><b>97–100:</b> Growth policies support economic and environmental harmony.</p>	<p><b>Examples:</b> Finland.</p> <p><b>Metrics:</b> Population growth ~0%; fertility rate ~2 children per woman.</p>

## 2. Demographic Factors: Urbanization Rate

Score Range	Description	Clear Guidance for Finer Gradations	Examples and Metrics*
<b>1–9</b>	Urbanization is chaotic and destabilizing.	<b>1–3:</b> Urban sprawl dominates; infrastructure and services collapse. <b>4–6:</b> Informal settlements grow unchecked, with no basic services. <b>7–9:</b> Government fails to manage migration; overcrowding leads to widespread poverty.	<b>Examples:</b> Haiti. <b>Metrics:</b> Urban population >50% in slums; infrastructure deficit >60%.
<b>10–19</b>	Very rapid urbanization with minimal planning.	<b>10–12:</b> Basic infrastructure lags far behind migration rates. <b>13–15:</b> Cities struggle with sanitation, housing, and transport crises. <b>16–19:</b> Urbanization benefits are limited to elites; marginalized populations are excluded.	<b>Examples:</b> Lagos, Nigeria. <b>Metrics:</b> Urban growth rate ~5%; slum population >40%.
<b>20–29</b>	High urbanization rates with early-stage planning.	<b>20–22:</b> Pilot programs improve housing and transport in select cities. <b>23–26:</b> Public-private partnerships address urban challenges. <b>27–29:</b> Urban infrastructure begins expanding to secondary cities.	<b>Examples:</b> Nairobi, Kenya. <b>Metrics:</b> Urban growth rate ~4%; slum population ~30%.
<b>30–39</b>	Moderate urbanization with visible progress in planning.	<b>30–33:</b> Affordable housing projects reduce slum populations. <b>34–36:</b> Urban transport systems expand moderately.	<b>Examples:</b> Jakarta, Indonesia. <b>Metrics:</b> Urban growth rate ~3%;

<i>Continuation of the table</i>			
		<b>37–39:</b> Secondary cities emerge as viable alternatives to overcrowded capitals.	slum population ~20%.
<b>40–49</b>	Balanced urbanization with effective management.	<b>40–42:</b> Cities implement green and sustainable urban planning policies. <b>43–46:</b> Urban and rural areas see integrated economic development. <b>47–49:</b> Public services adapt effectively to urban growth.	<b>Examples:</b> Kuala Lumpur, Malaysia. <b>Metrics:</b> Urban growth rate ~2.5%; slum population <10%.
<b>50–59</b>	Urbanization fuels economic development sustainably.	<b>50–52:</b> Infrastructure investment outpaces urban growth. <b>53–56:</b> Public transportation systems achieve significant coverage. <b>57–59:</b> Urban areas contribute to regional economic integration.	<b>Examples:</b> Ho Chi Minh City, Vietnam. <b>Metrics:</b> Urban growth rate ~2%; slum population <5%.
<b>60–69</b>	Urbanization drives long-term stability and growth.	<b>60–63:</b> Urbanization policies align with sustainable development goals. <b>64–66:</b> Cities achieve global standards for livability. <b>67–69:</b> Urban innovation hubs emerge as economic drivers.	<b>Examples:</b> Seoul, South Korea. <b>Metrics:</b> Urban growth rate ~1.5%; livability index >80%.
<b>70–79</b>	Regional leader in sustainable urbanization.	<b>70–73:</b> Urban planning policies are adopted regionally. <b>74–76:</b> Cities balance cultural heritage with modernization. <b>77–79:</b> Urban centers drive economic growth while ensuring equity.	<b>Examples:</b> Warsaw, Poland. <b>Metrics:</b> Urban growth rate ~1%; livability index ~85%.



<i>Continuation of the table</i>			
<b>80–89</b>	Global benchmark for urbanization.	<b>80–83:</b> Urbanization enhances national competitiveness. <b>84–86:</b> Cities integrate cutting-edge technologies into governance. <b>87–89:</b> Urban planning sets international standards for sustainability.	<b>Examples:</b> Berlin, Germany. <b>Metrics:</b> Urban growth rate <1%; livability index ~90%.
<b>90–100</b>	Exemplary urbanization model.	<b>90–93:</b> Cities achieve seamless integration of livability, innovation, and sustainability. <b>94–96:</b> Urbanization policies inspire global frameworks. <b>97–100:</b> Urban centers consistently rank among the world's most livable.	<b>Examples:</b> Helsinki, Finland. <b>Metrics:</b> Urban growth rate ~0%; livability index >95%.

### 3. Demographic Factors: Youth Bulge

Score Range	Description	Clear Guidance for Finer Gradations	Examples and Metrics*
<b>1–9</b>	Youth bulge drives social unrest and instability.	<b>1–3:</b> Youth unemployment exceeds 50%, fueling extremism and violence. <b>4–6:</b> Education and job opportunities are virtually nonexistent. <b>7–9:</b> Large segments of the youth population remain disengaged from society.	<b>Examples:</b> Afghanistan. <b>Metrics:</b> Youth unemployment >50%; education access <30%.
<b>10–19</b>	Youth bulge creates severe social tensions.	<b>10–12:</b> Marginal education access limits job readiness. <b>13–15:</b> Unemployment among youth sparks frequent protests.	<b>Examples:</b> Sudan. <b>Metrics:</b> Youth unemployment

*Continuation of the table*

		<b>16–19:</b> Informal economies absorb some youth, but instability persists.	~40%; education access ~40%.
<b>20–29</b>	Youth bulge challenges governance but sees initial progress.	<b>20–22:</b> Skill-building programs emerge in urban areas. <b>23–26:</b> Youth-focused policies gain traction but lack funding. <b>27–29:</b> Education reforms begin to address unemployment.	<b>Examples:</b> Kenya. <b>Metrics:</b> Youth unemployment ~30%; skill training coverage ~20%.
<b>30–39</b>	Youth bulge supports economic growth with targeted reforms.	<b>30–33:</b> Vocational training programs expand significantly. <b>34–36:</b> Job creation schemes reduce unemployment steadily. <b>37–39:</b> Youth are engaged in civic and social development projects.	<b>Examples:</b> Indonesia. <b>Metrics:</b> Youth unemployment ~25%; skill training coverage ~40%.
<b>40–49</b>	Youth bulge becomes a demographic dividend.	<b>40–42:</b> Youth-led entrepreneurship increases economic diversity. <b>43–46:</b> Education access improves across urban and rural areas. <b>47–49:</b> Youth participation in governance strengthens social stability.	<b>Examples:</b> Vietnam. <b>Metrics:</b> Youth unemployment ~20%; education access ~60%.
<b>50–59</b>	Youth drive economic innovation and social cohesion.	<b>50–52:</b> National policies integrate youth development across sectors. <b>53–56:</b> Higher education institutions align with market needs. <b>57–59:</b> Youth unemployment drops below 15%.	<b>Examples:</b> Malaysia. <b>Metrics:</b> Youth unemployment ~12%; tertiary education enrollment ~40%.

*Continuation of the table*

<b>60–69</b>	Youth bulge fosters sustained economic growth.	<b>60–63:</b> Youth engagement drives innovation in tech and entrepreneurship. <b>64–66:</b> Public- private partnerships support youth job creation. <b>67–69:</b> Nation leads regional-ly in youth employment rates.	<b>Examples:</b> Poland. <b>Metrics:</b> Youth unemployment ~10%; education access >70%.
<b>70–79</b>	Regional benchmark for youth development.	<b>70–73:</b> Youth policies inspire regional collaboration. <b>74–76:</b> Public and private sectors align to support youth-driven innovation. <b>77–79:</b> Youth satisfaction with governance and opportunities is high.	<b>Examples:</b> South Korea. <b>Metrics:</b> Youth unemployment <8%; tertiary education enrollment ~60%.
<b>80–89</b>	Global leader in youth engagement.	<b>80–83:</b> Youth demographic drives global competitiveness. <b>84–86:</b> National policies create unparalleled opportunities for youth. <b>87–89:</b> Youth satisfaction ranks among the highest globally.	<b>Examples:</b> Germany. <b>Metrics:</b> Youth unemployment <5%; education access >90%.
<b>90–100</b>	World-class model for youth inclusion.	<b>90–93:</b> Youth play a pivotal role in governance, innovation, and sustainability. <b>94–96:</b> Policies ensure inter-generational equity and opportunity. <b>97–100:</b> Nation sets global benchmarks for youth engagement and development.	<b>Examples:</b> Finland. <b>Metrics:</b> Youth unemployment <3%; tertiary education enrollment ~95%.

*\* The GIRA Criteria examples are illustrative guides, not guaranteed representations of score ranges, and users must independently verify data for their evaluations. Miraziz Khidoyatov and affiliates disclaim all liability for outcomes arising from their use. Users assume full responsibility for applying the framework.*

# **APPENDIX B**

## **EPI CRITERIA**

**1. Natural Resource Wealth (NRW)**

<b>Score Range</b>	<b>Description</b>	<b>Clear Guidance for Finer Gradations</b>	<b>Exam- ples*</b>
<b>1–9</b>	Critically deficient resource base; negligible exploitable assets.	1–3: No significant energy, mineral, or agricultural resources; severe resource scarcity. 4–6: Minimal resources (e.g., small-scale agriculture) with no export potential. 7–9: Limited arable land or water, insufficient for economic growth.	Maldives, Somalia
<b>10–19</b>	Severely limited resources; marginal economic contribution.	10–12: Small deposits of minerals or energy with low extraction feasibility. 13–15: Basic agricultural capacity supports subsistence but not exports. 16–19: Isolated resource finds (e.g., minor oil fields) with high extraction costs.	Niger, Mali
<b>20–29</b>	Limited resource wealth with emerging potential.	20–22: Modest agricultural output supports local markets; minor mineral deposits. 23–26: Small-scale energy resources (e.g., hydropower) begin contributing to GDP. 27–29: Investments in resource exploration yield incremental gains.	Uganda, Paraguay
<b>30–39</b>	Moderate resource wealth; supports economic diversification.	30–33: Agricultural exports grow but face scalability issues. 34–36: Energy or mineral resources (e.g., coal, copper) contribute significantly to trade. 37–39: Sustainable resource management policies enhance long-term potential.	Ghana, Ecuador

*Continuation of the table*

<b>40–49</b>	Balanced resource wealth; drives economic stability.	40–42: Diverse agricultural outputs support regional trade. 43–46: Energy or mineral sectors attract foreign investment. 47–49: Resource wealth integrates with industrial growth, reducing dependency risks.	Indonesia, Columbia
<b>50–59</b>	Strong resource wealth; fuels national growth.	50–52: Agriculture and energy sectors are globally competitive. 53–56: Mineral resources (e.g., rare earths) drive high-value exports. 57–59: Resource diversification mitigates commodity price volatility.	Brazil, Argentina
<b>60–69</b>	Robust resource wealth; supports regional leadership.	60–63: Energy exports (e.g., oil, gas) dominate global markets. 64–66: Agricultural innovation boosts yields and sustainability. 67–69: Resource wealth underpins industrial and technological advancement.	Russia, Australia
<b>70–79</b>	High resource wealth; drives economic resilience.	70–73: Diverse resources support multiple industries. 74–76: Sustainable extraction policies align with global standards. 77–79: Resource wealth fosters innovation (e.g., green energy).	Venezuela, Kazakhstan
<b>80–89</b>	Benchmark-level resource wealth; global influence.	80–83: Nation leads in energy or mineral exports. 84–86: Agricultural potential supports food security and trade. 87–89: Resource policies set regional benchmarks for sustainability.	Qatar, Kuwait
<b>90–100</b>	World-class resource wealth; global leadership.	90–93: Resources drive unparalleled economic growth. 94–96: Nation shapes global resource markets (e.g., OPEC influence). 97–100: Sustainable resource management sets global standards.	UAE

## 2. Population Scale (PS)

Score Range	Description	Clear Guidance for Finer Gradations	Examples*
<b>1–9</b>	Critically low or unsustainable population dynamics.	1–3: Tiny population (<1M) with high dependency ratio (>100%); no youth bulge. 4–6: Aging population with declining birth rates; severe labor shortages. 7–9: Minimal population growth, threatening economic viability.	Monaco, Vatican City
<b>10–19</b>	Very small or declining population; limited economic potential.	10–12: Population <5M with low youth bulge (<10%); high emigration. 13–15: Aging demographics with birth rates below replacement (<1.5). 16–19: Isolated urban growth but rural depopulation.	Malta, Latvia
<b>20–29</b>	Small population with emerging demographic potential.	20–22: Population 1.5–2) support slow growth. 27–29: Urbanization boosts labor force participation.	Serbia, Slovenia
<b>30–39</b>	Moderate population with balanced demographics.	30–33: Population 15%) drives labor growth. 34–36: Dependency ratio improves (~70–80%); education access expands. 37–39: Demographic dividend begins to emerge.	Chile, Tunisia
<b>40–49</b>	Growing population supporting economic development.	40–42: Population 20%) fuels productivity. 43–46: Balanced age distribution reduces dependency (~60–70%). 47–49: Education and health investments enhance workforce quality.	Malaysia, Peru

*Continuation of the table*

<b>50–59</b>	Strong population base; significant demographic dividend.	50–52: Population 25%) drives innovation. 53–56: Low dependency ratio (~40–50%) supports economic growth. 57–59: Urban and rural demographics align for balanced development.	Colombia, South Africa
<b>60–69</b>	Robust population with regional economic influence.	60–63: Population 30%) maximizes labor force. 64–66: Education systems produce skilled workers. 67–69: Demographic policies ensure sustainable growth.	Bangladesh, Nigeria
<b>70–79</b>	Large population driving national growth.	70–73: Population 35%) fuels industrial growth. 74–76: High workforce participation enhances productivity. 77–79: Nation leverages demographics for regional leadership.	Ethiopia, Pakistan
<b>80–89</b>	Benchmark-level population scale; global influence.	80–83: Population 40%) drives global markets. 84–86: Education and health systems optimize demographic dividend. 87–89: Demographic policies set regional standards.	India, Nigeria
<b>90–100</b>	World-class population scale; global leadership.	90–93: Population >1B; youth bulge (>45%) shapes global economy. 94–96: Nation leads in workforce innovation and productivity. 97–100: Demographic stability ensures long-term global dominance.	No examples fit



**3. Strategic Geographic Position (SGP)**

<b>Score Range</b>	<b>Description</b>	<b>Clear Guidance for Finer Gradations</b>	<b>Examples*</b>
<b>1–9</b>	Critically isolated; no strategic position.	1–3: Landlocked with no access to trade routes; no ports or connectivity. 4–6: Poor infrastructure isolates the country from regional markets. 7–9: Minimal trade links with neighboring countries.	Chad, South Sudan
<b>10–19</b>	Severely limited strategic position.	10–12: Landlocked with rudimentary roads; trade dependent on distant ports. 13–15: Minor connectivity to one neighbor; no bloc membership. 16–19: Basic infrastructure supports limited regional trade.	Burkina Faso, Nepal
<b>20–29</b>	Limited strategic position with emerging connectivity.	20–22: Improved roads connect to one trade route; small ports exist. 23–26: Peripheral membership in a regional bloc (e.g., ECOWAS). 27–29: Investments in logistics begin to enhance trade links.	Paraguay, Uganda
<b>30–39</b>	Moderate strategic position; supports regional trade.	30–33: Access to regional trade routes; small but functional ports. 34–36: Active participation in one economic bloc. 37–39: Logistics improvements reduce trade costs significantly.	Bolivia, Zambia
<b>40–49</b>	Balanced strategic position; enhances economic stability.	40–42: Multiple trade routes connect to regional hubs; ports support exports. 43–46: Strong bloc membership (e.g., ASEAN) boosts connectivity. 47–49: Logistics performance attracts regional investment.	Sri Lanka, Morocco

*Continuation of the table*

<b>50–59</b>	Strong strategic position; drives regional growth.	50–52: Major ports handle regional trade; multiple bloc memberships. 53–56: Logistics infrastructure supports efficient trade flows. 57–59: Proximity to trade blocs enhances global market access.	Malaysia, South Africa
<b>60–69</b>	Robust strategic position; regional leadership.	60–63: Ports and trade routes dominate regional logistics. 64–66: Nation leverages connectivity for economic influence. 67–69: Infrastructure supports rapid trade expansion.	Thailand, Turkey
<b>70–79</b>	High strategic position; global trade influence.	70–73: Major global trade routes pass through the country. 74–76: Logistics performance rivals global leaders. 77–79: Nation shapes regional trade policies via bloc leadership.	Hong Kong, UAE
<b>80–89</b>	Benchmark-level strategic position; global hub.	80–83: Ports and logistics are world-class; multiple bloc leadership roles. 84–86: Nation drives global trade efficiency. 87–89: Connectivity policies set regional standards.	Singapore, South Korea
<b>90–100</b>	World-class strategic position; global leadership.	90–93: Nation is a global trade hub; ports handle massive volumes. 94–96: Connectivity shapes global trade flows. 97–100: Logistics and bloc influence set global benchmarks.	China, Singapore

**4. Innovation and Entrepreneurship (IE)**

<b>Score Range</b>	<b>Description</b>	<b>Clear Guidance for Finer Gradations</b>	<b>Examples*</b>
1–9	Negligible innovation and entrepreneurship; no digital presence.	1–3: No internet or startup activity; innovation absent. 4–6: Minimal mobile usage (<10%); no formal startups. 7–9: Isolated digital access in urban areas; entrepreneurship limited to informal markets.	South Sudan, Eritrea
10–19	Severely limited innovation; rudimentary digital adoption.	10–12: Basic mobile networks; startups rare and unsupported. 13–15: Internet access (<20%) in urban hubs; informal entrepreneurship. 16–19: Early digital policies; nascent startup ecosystems.	Haiti, Yemen
20–29	Limited innovation with emerging digital and startup activity.	20–22: Mobile penetration grows (~30%); startups face regulatory barriers. 23–26: Digital access expands to secondary cities; small incubators emerge. 27–29: Government pilots startup support; innovation policies begin.	Uganda, Bolivia
30–39	Moderate innovation; growing digital and entrepreneurial ecosystems.	30–33: Internet penetration (~40%) supports e-commerce; startups grow in urban areas. 34–36: Regulatory reforms ease business creation. 37–39: Innovation hubs attract regional investment.	Kenya, Peru

*Continuation of the table*

40–49	Balanced innovation; stable digital and startup ecosystems.	40–42: Digital adoption (~50%) drives economic activity; startups scale locally. 43–46: Incubators and accelerators support entrepreneurship. 47–49: Innovation policies align with regional standards.	Indonesia, Colombia
50–59	Strong innovation; robust digital and entrepreneurial growth.	50–52: High mobile penetration (~60%); startups attract venture capital. 53–56: Digital infrastructure supports SMEs; innovation hubs thrive. 57–59: Nation emerges as a regional startup leader.	Brazil, South Africa
60–69	High innovation; regional leadership in digital and startups.	60–63: Internet penetration (~70%) enables digital economy; startups export globally. 64–66: Policies foster tech innovation (e.g., AI, fintech). 67–69: Nation rivals global leaders in startup ecosystems.	Malaysia, Chile
70–79	Benchmark-level innovation; global startup influence.	70–73: Digital adoption (~80%) drives cross-sector innovation. 74–76: Startup ecosystems attract global investors. 77–79: Nation sets regional benchmarks for digital and entrepreneurial growth.	Israel, Estonia
80–89	Global leader in innovation and entrepreneurship.	80–83: Near-universal digital access (~90%); startups lead global markets. 84–86: Innovation policies drive tech unicorns. 87–89: Nation shapes global digital and startup trends.	Singapore, South Korea

*Continuation of the table*

90–100	World-class innovation and entrepreneurship.	90–93: Digital economy dominates; startups set global standards. 94–96: Nation leads in AI, fintech, and green tech innovation. 97–100: Unparalleled startup ecosystem drives global economic growth.	USA, Switzerland
--------	--	---	------------------

*\* The EPI Criteria examples are illustrative guides, not guaranteed representations of score ranges, and users must independently verify data for their evaluations. Miraziz Khidoyatov and affiliates disclaim all liability for outcomes arising from their use. Users assume full responsibility for applying the framework.*

# **APPENDIX C**

## **COMPASS STRESS TEST WORKSHEET**

## **Appendix C: COMPASS Stress Test Worksheet**

### **Instructions**

**1. Enter Baseline Scores:** Record the market's GIRA, EPI, and SIAS scores (1–100) in the respective tables.

**2. Perform Scenario-Based Testing (Table 1):** Apply the four scenarios (Optimistic, Pessimistic, Mixed, Correlated) by adjusting scores as specified, then recalculate the COMPASS score ( $\text{COMPASS} = (0.5 \times \text{GIRA}) + (0.2 \times \text{EPI}) + (0.3 \times \text{SIAS})$ ). Note: Cap EPI at 100 before weighting.

**3. Conduct Sensitivity Check (Table 2):** Adjust GIRA by  $\pm 5$ , keeping EPI and SIAS constant, and recalculate COMPASS.

**4. Apply Override Rule (Table 3):** If any COMPASS score is  $< 50$ , check if  $\text{EPI} > 85$ ,  $\text{SIAS} > 65$ ,  $\text{GIRA} \geq 40$  to flag for due diligence.

**5. Interpret Results:** Use the decision guidance to determine next steps (Proceed, Take Closer Look, Reject).

Table 1

**Scenario-Based Testing (Example: Uzbekistan)**

Enter baseline scores and apply adjustments for each scenario. Calculate COMPASS scores and note changes.

Market	Scenario	GIRA	EPI	SIAS	COMPASS	Change	Interpretation
<b>Uzbekistan</b>	Original	48.4	98.26	62.6	62.6	-	Viable (50–74)
	Optimistic (GIRA +10)	58.4	98.26	62.6	67.6	+5.0	Viable, strengthened
	Pessimistic (GIRA –10)	38.4	98.26	62.6	57.6	-5.0	Viable, reduced
	Mixed (EPI +5, GIRA +2, SIAS –5)	50.4	100*	57.6	62.6	±0	Viable, stable
	Correlated (GIRA –10, SIAS –5)	38.4	98.26	57.6	56.1	-6.5	Viable, reduced
<b>Your Market:</b> [Insert Name]	Original	[Enter]	[Enter]	[Enter]	[Calculate]	-	[≥ 75: Prime; 50–74: Viable; <50: High Risk]
	Optimistic (GIRA +10)	[GIRA +10]	[EPI]	[SIAS]	[Calculate]	[±]	[Interpret]
	Pessimistic (GIRA –10)	[GIRA –10]	[EPI]	[SIAS]	[Calculate]	[±]	[Interpret]
	Mixed (EPI +5, GIRA +2, SIAS –5)	[GIRA +2]	[EPI +5]*	[SIAS –5]	[Calculate]	[±]	[Interpret]
	Correlated (GIRA –10, SIAS –5)	[GIRA –10]	[EPI]	[SIAS –5]	[Calculate]	[±]	[Interpret]

\* Cap EPI at 100 before applying the 0.2 weight.



**Interpretation Guidance:**

- **Optimistic:** Higher stability signals upside potential.
- **Pessimistic:** Scores  $\geq 50$  show resilience;  $<50$  flag risks.
- **Mixed:** Stability offsets strategic dips, maintaining viability.
- **Correlated:** Dual shocks test robustness;  $\geq 50$  indicates strength.

**Decision:**

- If all COMPASS scores are  $\geq 50$ , proceed to Sensitivity Check.
- If any score is  $<50$ , proceed to Sensitivity Check and evaluate Override Rule.
- If all scores are  $\geq 75$  (rare), stop and plan immediate expansion.

Table 2

**Sensitivity Check (Example: Germany)**

Adjust GIRA by  $\pm 5$ , keeping EPI and SIAS constant, to test COMPASS stability.

Market	Scenario	GIRA	EPI	SIAS	COMPASS	Change	Interpretation
Germany	Original	76.1	58.44	64.5	69.1	-	Viable (50–74)
	Lower GIRA (GIRA – 5)	71.1	58.44	64.5	66.6	-2.5	Viable, stable
	Higher GIRA (GIRA +5)	81.1	58.44	64.5	71.6	+2.5	Viable, enhanced
<b>Your Market:</b> [Insert Name]	Original	[Enter]	[Enter]	[Enter]	[Enter]	-	[Interpret]
	Lower GIRA (GIRA – 5)	[GIRA – 5]	[EPI]	[SIAS]	[Calculate]	[ $\pm$ ]	[ $\geq 50$ : Stable; <50: Vulnerable]
	Higher GIRA (GIRA +5)	[GIRA +5]	[EPI]	[SIAS]	[Calculate]	[ $\pm$ ]	[ $\geq 50$ : Enhanced; <50: Vulnerable]

**Interpretation Guidance:**

- **Lower GIRA:** COMPASS change <5 points indicates stability;  $\geq 5$  points suggests caution.
- **Higher GIRA:** Enhanced scores show upside; <50 flags risks.

**Decision:**

- If COMPASS remains  $\geq 50$ , proceed to Override Rule (if needed).
- If COMPASS drops <50, evaluate Override Rule.
- Note sensitivity >5 points for cautious planning.

*Table 3*

# **Override Rule Checklist (Example: Myanmar)**

If any COMPASS score is <50, check criteria to determine if the market warrants further review.

Market	Criteria	Value	Meets Threshold?	Action
Myanmar	EPI > 85	66.36	No	Reject unless unique factors apply
	SIAS > 65	20.9	No	-
	GIRA ≥ 40	33.7	No	-
<b>Your Market:</b> [Insert Name]	EPI > 85	[Enter]	[Yes/No]	[If Yes, proceed to the SIAS; else reject]
	SIAS > 65	[Enter]	[Yes/No]	[If Yes, proceed to the GIRA; else reject]
	GIRA ≥ 40	[Enter]	[Yes/No]	[If all Yes, proceed to due diligence; else reject]

## **Action Guidance:**

- **Meets All Criteria:** Mark for due diligence (e.g., legal analysis, partner scans; see Section 2.7).
- **Does Not Meet Criteria:** Reject unless unique factors (e.g., exclusive partnerships) justify retention.

## Decision Guidance

Based on Tables 1–3, determine the market’s viability:

- **Proceed with Confidence:** COMPASS  $\geq 50$  across all scenarios, sensitivity  $< 5$  points. Plan expansion (e.g., feasibility studies, partnerships).
- **Take Closer Look:** COMPASS  $< 50$  but meets override criteria (EPI  $> 85$ , SIAS  $> 65$ , GIRA  $\geq 40$ ) or borderline (48–52). Conduct targeted due diligence or pilot projects.
- **Reject:** COMPASS  $< 50$ , no override criteria met. Redirect resources unless exceptional factors apply.
- **Stop:** If COMPASS  $\geq 75$  in all scenarios, proceed immediately with full-scale expansion.

### Example Decisions:

- **Uzbekistan (Table 1):** COMPASS ranges 56.1–67.6, sensitivity  $< 5$  points  $\rightarrow$  Proceed with Confidence for phased entry, prioritizing agricultural synergies (Section 3.2.7).
- **Germany (Table 2):** COMPASS ranges 66.6–71.6, sensitivity  $< 5$  points  $\rightarrow$  Proceed with Confidence, leveraging infrastructure and regulatory clarity.
- **Myanmar (Table 3):** COMPASS = 36.4, does not meet override criteria  $\rightarrow$  Reject unless unique factors apply.

### Notes:

- Recalculate COMPASS scores iteratively as new data emerges to refine results.
- Document all data sources and qualitative judgments for transparency.
- Consult Section 2.5 for detailed stress test methodology and theoretical foundations.

SCIENTIFIC EDITIONS

# **THE DEFINITIVE GUIDE TO INTERNATIONAL BUSINESS EXPANSION**

**By Miraziz Khidoyatov**

Computer typesetting — *Yevhen Tkachenko*

Format 60×84/16.

Offset printing. Offset paper.

Headset NewCenturySchoolbook.

Internauka Publishing House LLC

Ukraine, Kyiv, street Pavlovskaya, 22, office. 12

Contact phone: +38 (067) 401-8435

E-mail: [editor@inter-nauka.com](mailto:editor@inter-nauka.com)

[www.inter-nauka.com](http://www.inter-nauka.com)

Certificate of inclusion in the State Register of Publishers

№ 6275 від 02.07.2018 p.