The European Commission’s science and knowledge service

Joint Research Centre
The Global Conflict Risk Index

Week on Composite Indicators and Scoreboards
8th November 2018

EC-Joint Research Centre
Peace & Stability

Marie Schellens
Content

1. The Global Conflict Risk Index (GCRI)
   And its contribution to policy
2. Variables and data providers
3. GCRI Projections
4. Country risk profiles
   Composite scores and graphics
5. Dissemination: Science4Peace Portal
6. Future developments
7. Challenges and discussion topics
1. The Global Conflict Risk Index

GCRI:
Annual country index of the statistical risk of violent conflict in the next 1-4 years
- Exclusively based on quantitative indicators from open sources
  - 24 variables in 5 dimensions: social, economic, security, political, geographical/environmental
- assumption that structural conditions in a country are linked to the occurrence of violent conflict:
  → statistical regression models to calculate probability and intensity of violent conflict.

url: http://conflictrisk.jrc.ec.europa.eu/
1. GCRI’s Contribution to Policy

Starting point in the **EU Conflict Early Warning System (EWS)**

- Annual exercise with EU External Action Service (EEAS)
- Identify and rank countries at high risk of violent conflict
- Followed by qualitative in-depth studies by country experts at EEAS

Contribute to

- Design of external policy for the EU as global actor
- Conflict risk prevention
## Selection of variables based on:
- scientific literature
- yearly expert workshops

## 2 New Variables:
- **Drought** (Source: Standardized Precipitation Evaporation Index SPEI)
- **Displaced people** (Source: Internal Displacement Monitoring Centre IDMC)

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### 2. GCRI variables and data providers

<table>
<thead>
<tr>
<th>Risk area</th>
<th>Concept</th>
<th>Indicator</th>
<th>Updated</th>
<th>Source</th>
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<td>Regime performance</td>
<td>Government Effectiveness</td>
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<td>Recent internal conflict</td>
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<td>HIKL, UCDF/PRIQ</td>
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<td>Neighbors with HVC</td>
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<td>World Bank</td>
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2. International data providers for the GCRI variables
Based on economic, social, environmental and political data, the regression models used for the GCRI gives an insight into the probability and intensity of conflict at country level annually.

- Logistic regression model → probability of conflict
- Linear regression model → intensity (1 – 10)
- Subnational conflict risk
- National conflict risk

http://publications.jrc.ec.europa.eu/repository/handle/JRC108767
4. Country risk profiles: Composite Score

Snapshot of a country’s structural risk at a given year

- Score on 10
- for all 24 structural indicators
- Averaged over
  - 10 concepts
  - 5 risk areas
  - Overall country score
Composite score depends on:
- Categorization of indicators into risk concepts and areas
- Weights for averaging over risk indicators, concepts and areas
  - Based on expert opinions
- Give a of a country’s prevailing **structural conditions** related to violent conflict, organized in an **conceptually clear** way:
  - indicates to policy-makers where advisable to intervene
  - Follow yearly developments
4. Country risk profiles: Composite Graphic

Visualizes a snapshot of a country’s structural profile at a given year.

- 5 risk areas
- 24 structural risk indicators
- Statistically projected risk for violent conflict → Probability and intensity

Possibility of presenting indicators development over time

Major risk factors

Based on the data in the Global Conflict Risk Index, the major risk areas for Country X are Transnational Ethnic Bonds, Level of Repression, Structural constraints, Recent internal conflict, Years since HVC and Youth bulge.

In particular concerns over SECURITY across the region and GEOGRAPHY AND ENVIRONMENT continue to threaten the stability of the Country X government.

Overall, Country X is at High risk.
5. Dissemination: Science4Peace Portal

http://science4peace.jrc.ec.europa.eu

• Web interface in secured environment for EC staff (EEAS) and accredited partners
• Interactive, non-technical communication of conflict risk information
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6. Future developments

• Conflict resilience:
  ▪ Flagship report on defining Resilience against violent conflict
  ▪ Developing indicator
• Climate change and conflict
• Machine learning for conflict risk projections
7. Challenges and discussion topics

- Composite scores and composite graphics
- Indicators and models
Any questions?
Reach our Peace & Stability team through matina.halkia@ec.europa.eu