

CASE STUDY 2.3

THE GLOBAL CONFLICT RISK INDEX

European Commission's Joint Research Centre (JRC)

The Global Conflict Risk Index (GCRI)⁵⁰ is the quantitative starting point of the European Union's conflict Early Warning System (EWS),⁵¹ first developed in 2014 by the European Commission's Joint Research Centre (JRC).⁵² It has been updated and revised yearly, in line with the latest developments in the scientific literature. The GCRI is part of the JRC Disaster Risk Management Knowledge Centre,⁵³ launched in 2015, to respond to the emerging need for evidence-based decision making in disaster risk management and to develop and maintain tools for addressing risks related to human-made and natural hazards.

The current version of the GCRI model covers 22 variables that represent structural conditions associated with conflict risk in six areas: politics, security, society, economy, geography/environment, and demographics. The variables were selected following an extensive review of the scientific literature and consultations with experts and practitioners from the European External Action Service (EEAS) and the Service for Foreign Policy Instruments (FPI). The criteria used for variable selection are based on theoretical literature, empirical evidence, data availability, and predictive performance.

The GCRI uses historical data from 1991 to the present to train a statistical model that can estimate the average probability of a conflict and the likely intensity of violence over the next one to four years. The model distinguishes between the following three types of conflict: state-based conflict, non-state conflict, and one-sided violence.

The GCRI assesses each country's overall risk likelihood based on historical patterns and structural conditions and contributes to the EU's conflict EWS by providing sys-

tematic conflict risk estimates comparable over time and between countries. Monitoring structural causes helps the EEAS identify trends in violence and conflict onset and, consequently, be better prepared to swiftly mobilize its political, development, and crisis response tools.

These conflict risk assessments per country are probabilistic. Accordingly, countries with a high conflict risk do not inevitably face conflict, while some low-risk countries may still experience violence in the near future.

To provide the EU's conflict early warning system with greater risk accuracy, frequent updates, and finer spatial resolution, the JRC is developing the Dynamic Conflict Risk Model. This new model estimates conflict risk at the sub-national level for the continent of Africa over the next one to six months, focusing primarily on dynamic variables that reflect recent ground-level developments. For example, the model uses data on incidents such as riots and protests as well as geospatial data on droughts and other extreme weather events to understand the local impacts and security implications of climate change. In addition, the model tests various data sources and variables, together with advanced machine-learning methods, to improve its accuracy and predictive performance. Once the model performs reasonably well, the goal of the JRC is to expand it on a global scale and provide updated conflict risk forecasts on a monthly basis.

Intervening early in high-risk probability countries remains challenging when most of the attention is focused on responding to acute crises. However, data-driven insights allow policy makers to prioritize political engagement around important issues and not only urgent ones.

GCRI CONFLICT TYPES

The GCRI distinguishes between three types of conflict, as defined by the Uppsala Conflict Data Program (UCDP):

- **State-based conflict:** Armed conflict between two or more organized groups, one of which represents a state government.
- **Non-state conflict:** Armed conflict between two or more groups, neither of which is a state.
- **One-sided violence:** Direct and deliberate killing of civilians, perpetrated by a government or armed group.

In addition, the GCRI estimates the risk of all three categories combined. Note that the GCRI focuses exclusively on **internal conflict** and therefore does not assess the risk of armed conflict between states, i.e. interstate conflict.