

FY2014 MINERVA RESEARCH INITIATIVE TOPIC #2

Models of Societal Resilience and Change

The objective of this research track is to develop new insights into the social dynamics within states in general and authoritarian states in particular, and examine the factors that impact societal resilience, societal collapse, and the corresponding tipping points. The Department of Defense is interested in innovative frameworks and new data that may assist policymakers in developing improved methods for anticipating and identifying potential areas of unrest, instability, and conflict. Insights may inform strategic thinking about resource allocation for defense efforts and humanitarian aid as well as insights for national policy and engagement with both state and non-state actors before, during, and after transformations like those seen in recent regime transitions in North Africa and the Middle East.

Regions of interest include Sub-Saharan Africa, South Asia, Latin America, Middle East, Southeast Asia

Subtopic 2-A: Economic contributors to stability

Themes of interest include:

- The impact, if any, of changing economic activity, both formal and informal, on group, societal, state, regional, and international stability and security.
- The relationship, if any, between security, military capability, and national and international economic prosperity in the 21st century. In what context might sanctions be leveraged to build rather than undermine regime support?
- Economic and political science perspectives on economic reform and global market integration in terms of security, societal resilience, and instability.
- The roles, if any, of government and international organizations in monitoring, regulating, and understanding informal markets.
- The size and political impact of informal economies and illicit trade, including supply chains.
- The role, if any, of illicit trafficking (e.g., arms, drug, human, wildlife) in fueling violence.
- The potential role, activities, and impact of profit-motivated and violent non-state actors on social order, migration, and corruption, and in perpetuating fragility at the state and transnational levels.
- The role, if any, of ideology in the formation and functioning of underground markets.
- Interactions of underground markets with legitimate markets.
- Assessments of underground markets that sell and buy components, such as data, tools, and access, that enable many nations to acquire their cyber capabilities, resources, and talents. How do underground markets in the cyber realm compare to underground markets of physical goods?
- Economic models of impacts from disruptive cyber intrusions and cyber crime, and the transference of these capabilities to others.

Subtopic 2-B: Governance contributors to stability

Themes of interest include:

- The role, if any, of norm-based governance factors such as reputation, trust, reciprocity, enforcement of compliance, and self-regulation on effective governance and stability. Do these factors change within a cyber-security context?
- The relationship, if any, between government institutions (e.g., military, police) and the population and various subpopulations in areas such as generalized trust, legitimacy, social integration, corruption, etc.
- Community attitudes toward crime, fault, punishment, and justice, and the compatibility or consistency of those attitudes with formal criminal justice systems.
- Non-governmental alternatives to formal state institutions for the provision of security, goods, and services, and their effect on state sovereignty and legitimacy.
- Common characteristics shared by organizations that successfully challenge states, such as the services they provide, their forms of mobilization, and their relationship with residents.
- Ungoverned, under-governed, misgoverned, contested, and exploitable areas, and the geographical, political, civil, and resource factors that create these safe havens for insurgents.

Subtopic 2-C: Energy, environment, and resource contributors to stability

Themes of interest include:

- Definitions and models of the critical variables of state instability due to resource scarcity or imbalance, including food and water insecurity. Can early indicators of societal stress be identified?
- The societal impacts (including political and economic) of long-term environmental stress in both the developing world and the industrialized world. What feedback loops exist?
- The role and second order effects of climate change or extreme events on population migration.
- The relationship, if any, between changes in energy usage and the environment, perceptions of risk, and subsequent human behavior.
- The relationship, if any, between extractive mineral wealth, agricultural practices, property rights, economic and social inequality, and conflict, especially at a sub-national level. For example, NGOs have pushed for transparency of the supply chain for conflict minerals and conflict gold, possibly reducing trade for citizens in conflict areas. How might the net gain or loss in stability of such actions be measured?
- Other interdisciplinary analyses of relevant human and natural system processes and complex interactions among human and natural systems at diverse scales, e.g., emergent properties, cognitive systems complicit in both reflective and intuitive inference-making, etc.

Subtopic 2-D: Additional factors impacting societal resilience and stability

Themes of interest include:

- The impact and strategic implications of demographic changes (e.g., youth bulge, urban trends, race, age, mobility, employment status, per capita wealth) on internal and external stability.
- Factors determining societal resilience in *megacities* – how some are the most efficient use of space, and other are failing to cope with rapidly urbanization.
- The role of women's status in issues of global conflict.
- Sociological implications of cyber-conflict (e.g., social order, conflict, de-legitimacy, health issues, trust in authority).
- Other approaches to examine the sources of societal resilience and instability, and the sources of present and future conflict.

Research Topic Chiefs:

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