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Anticipating global and diffuse risks to prevent conflict and governance breakdown: lessons from the EU's southern neighbourhood

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ABSTRACT

Where societies display sufficient resilience to global and diffuse risks they are able to avoid tipping-over into governance breakdown and violent conflict. Similarly, if external actors such as the EU wish to build resilience in Europe's volatile neighbourhood, they require a systematic understanding of global and diffuse risks and tipping-points in order to develop long-term resilience-building strategies. But how should global and diffuse risks and tipping-points be conceptualized and understood? How can policy-makers anticipate global and diffuse risks to avoid governance breakdown and violent conflict in areas of limited statehood? This article addresses these questions. First, it argues, it is only by systematically integrating global and diffuse risks into explanatory logics of governance breakdown and violent conflict that we can develop better predictive models and resilience-building strategies. Second, it articulates a six-cluster typology of global and diffuse risks. Lastly, it demonstrates that in areas of limited statehood societies confront three distinct types of tipping-points that can overwhelm societal resilience. EU early-warning and resilience-fostering policy ought to distinguish between them and prepare to address each type.

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1. Introduction

Areas of Limited Statehood (ALS) are areas where central government authorities and institutions are too weak to adopt, implement, and enforce rules and/or uphold a monopoly over the use of force. Where functional statehood is absent or receding, alternative governors seek to rule and “non-Weberian political formations” emerge.¹ ALS are therefore neither ungoverned spaces nor are they necessarily ungovernable. Rather, ALS are *arenas* of Contested Orders (CO) in which state and non-state actors challenge the norms, rules, and arrangements according to which societies and political systems are or ought to be governed (see introduction to this special

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issue). From a global, as well as an historical perspective, ALS and CO are hardly exceptional,² but the EU's southern neighbourhood represents an area of the world where conditions of limited statehood and order contestation are unusually pervasive.³

Though ALS and CO are the default conditions in the EU's southern neighbourhood, we do not observe homogeneity of outcomes across the region in terms of governance breakdown or the onset of violent conflict (i.e. on the dependent variable).⁴ The fate of ALS in Iraq, Libya, Lebanon, Syria, and Yemen has, crucially, not been shared by contemporary Algeria, Egypt, Jordan, Morocco, Tunisia, or Turkey for example.⁵ Governance outcomes, rather, depend on the degree to which societal resilience – defined as the adaptive capacity of societies, communities, and individuals to deal with risks in a peaceful manner – is there to deflect and cope with risks. The central challenge for the EU is therefore to better grasp the conditions under which the vulnerabilities to risks inherent in ALS and CO are liable to “tip-over” into governance breakdown and violent conflict that threaten local populations and, indirectly, the EU. This challenge lies at the very heart of the European Global Strategy (EUGS) launched by the EU in 2016, and is increasingly shared by other international actors as exemplified by the Global Fragility Act adopted by the United States Congress in 2020.⁶ In the EU and elsewhere, transformative engagement with vulnerable states is shifting from democracy promotion to resilience-building.⁷

Against the background of this shift, *risks* and *tipping-points* represent key variables in need of conceptualization, analysis and operationalization by policy actors. The analytical framework pursued in this Special Issue both depends upon and encourages an enhanced understanding of the concepts of risks and tipping-points in three main ways: First, according to the framework: “The key independent variables are *risks* affecting the EU neighbourhood and thereby indirectly also the EU”.⁸ Hence, the question of how to categorize risks is crucial to understanding the range of factors impacting societal resilience. It is the degree of societal resilience that explains divergence of outcomes between ALS and CO that experience governance breakdown and violent conflict, and those that manage to peacefully adapt, or at least avoid such outcomes.⁹ Yet societal resilience itself cannot be evaluated independently from the risks it is supposed to contend with, and therefore those risks must be systematically mapped and factored into any analysis of resilience.

Second, depending on the degree of societal resilience, risks can affect governance outcomes in one of three archetypal ways: peaceful adaptation, continuity, or governance breakdown/violent conflict. What separates the former two outcomes (in which risks do not translate into threats) from the latter, is a low degree of resilience which reaches “a *tipping point* where societal resilience falls under a crucial threshold below which societies are no longer able to fend off and successfully cope with risks”.¹⁰ To better understand and predict tipping-points – the “trigger lines” separating manageable risks from genuine threats – requires a fuller, more nuanced conceptualization of the term than currently exists. As the analytical framework puts it: “To understand and analyze such tipping points, we need to take local circumstances and different combinations of factors into account”.¹¹

Lastly, risks and resilience affect tipping points in antipodal directions. Whereas risks make tipping points (and therefore governance breakdown and violent conflict) more likely, resilience renders reaching such tipping points less likely. Whether risks turn into threats then “depends on the extent to which resilient societies can successfully contain global and diffuse risks through good and effective governance...”¹²

Strengthening EU preparedness to better predict global and diffuse risks and bolster societal resilience against them, requires improved understanding of the ways in which such risks may interact in local contexts to precipitate tipping-points.

How should risks and tipping-points be conceptualized and approached by EU and other international political actors seeking to foster societal resilience in areas of limited statehood? By attending to the central variables of risks and tipping points, this article makes three key analytical and policy-relevant contributions: First, it makes the case for systematically integrating global and diffuse risks into explanatory theories of governance breakdown and the onset of violent conflict. We conceptualize global and diffuse risks and explain how they are distinguished from one another, as well as from local risks.¹³

Second, we take the proverbial plunge and articulate a six-cluster typology of global and diffuse risks. While mindful that processes of conflict onset and governance breakdowns display great complexity,¹⁴ we offer a risk typology meant to balance comprehensiveness with complexity-reducing parsimony. In this, we follow the science of systems modelling which recognizes a continuous process of trade-offs between complexity and accuracy.¹⁵ Accordingly, our typology is as simple as possible and as complex as needed to encapsulate the concept of global and diffuse risks.

Finally, we unpack the under-researched concept of tipping points and demonstrate how it relates to different risk clusters. Although the term enjoys wide usage in disaster-anticipation and conflict-prevention circles, it has received limited attention in the scholarly literature.¹⁶ We demonstrate that different risk clusters produce markedly different *types* of tipping points, some of whom fly in the face of traditional and intuitive understandings of the concept. These findings have direct ramifications for those entrusted with the task of anticipating threats.¹⁷ We distinguish between three types of tipping points, only one of which – what we call *one-time event* tipping points – aligns with common perceptions. Our analysis leads us to conceptualize and explore two additional archetypal categories of tipping points – *cascading* and *layered* tipping points. These are distinguished from cascading or layered risks.

Conceptualizing tipping points in this fuller and more nuanced manner helps to better capture the effects of global and diffuse risks, such as those produced by the Covid-19 pandemic or the complex-interaction between climate change, demography and migratory pressures for instance. By recognizing the fact that tipping points come in these distinguishable forms, we also gain enhanced knowledge of the nature, sources, and limitations of societal resilience, and equip policymakers with a fuller toolkit for understanding how resilience is undermined or built. As such, this article speaks to the burgeoning community, inside EU and globally, seeking to develop more accurate and reliable analytical tools and predictive methods for anticipating and preventing governance breakdown and violent conflict.¹⁸

2. Bringing global and diffuse risks into explanatory logics

Scholarly preoccupation with the onset of violent conflict and governance breakdown in ALS remains overwhelmingly focused on local conditions and immediate “bad neighbourhood” effects, to the exclusion of global and diffuse risks. This lacunae is partly derivative of a long legacy of “methodological nationalism”¹⁹ that has tended to reify the state, treat domestic and international causes in binary terms, and relegate external factors to a residual category of influence.²⁰ It is also an unintended consequence of a

virtually hermetic disciplinary divide between those interested in the causes of civil war, revolution, and state fragility, versus the more recent and fragmented interest in global and diffuse risks; the latter emerging from disparate disciplines concerned with a wide variety of natural and anthropogenic hazards.²¹ Indeed, the prediction of conflict onset and political instability remains a controversial topic in academic research,²² and no early-warning system has proved reliable for policy-making.²³

The prevailing exclusion of global and diffuse risks is perhaps best captured with reference to the three explanatory logics dominating the literature on civil war onset. By far the most common type of contemporary political violence in areas of limited statehood,²⁴ civil wars have been explained in terms of grievance, greed, and opportunities.²⁵ Dating back to the 1960s, grievance-based accounts view violence as a reaction to deep-seeded ethnic, political or socioeconomic injustice.²⁶ In contrast, explanations centred on greed, adopt a microeconomic approach in which violent conflict and governance breakdowns occur where the opportunity costs of fighting are low, and where rebels can maximize economic gain from lootable natural resources or rent seeking.²⁷ According to the third and most influential explanatory logic of civil wars, insurgent violence is best explained by the opportunities opened for rebels to challenge state authority in weak states. All three explanations emphasize intra-societal processes and state-level institutional conditions.

A similar state of affairs prevails in the state fragility field. Summarizing over a decade of research by the influential Political Instability Task Force, Goldstone identifies “five major pathways that comprise the most common processes leading to state-failure”.²⁸ These are: (i) escalation of communal group (ethnic or religious) conflicts; (ii) state predation; (iii) regional or guerrilla rebellion; (iv) democratic collapse leading to a coup d'état or civil war and; (v) succession reform or crisis in an authoritarian state. The latest major studies on causes of “acute political instability”,²⁹ similarly identify exclusionary political regimes, uneven economic development, the local culture of opposition and protest, or a widening gap between formal (state) and informal (societal) institutions, as the causes of governance breakdown and insurgent violence. Though some scholars have recognized that transnational dynamics play an important role,³⁰ none have systematically mapped or integrated global and diffuse risks into their explanatory logics.

This gap has become jarring. The latest World Bank *Strategy for Fragility, Conflict and Violence 2020–2025*, observes that: “Climate change, demographic change, migration, digital transformation, illicit financial flows, and violent extremism are often interconnected, with effects that transcend borders”.³¹ Similarly, EU defence ministers have tasked the High Representative for Foreign Affairs and Security Policy with developing a “comprehensive, 360 degrees analysis of the full range of threats and challenges” facing the EU.³² Yet analysts have expressed concern over a “Christmas tree approach” to risk identification; one that is both disorganized and omits controversial issues.³³ With these needs and potential criticisms in mind, we articulate a six-cluster typology of global and diffuse risks most likely to affect societal resilience in ALS surrounding the EU.

3. A six-cluster typology of risks

Although a universally agreed-upon definition for risk has been difficult to attain, the concept is essentially “a measure of the probability and severity of adverse effects”.³⁴ It

embodies the likelihood of harm, the expected severity of that harm and, implicitly at least, a temporal dimension; the immediacy and duration of harm to a given biological or social system. Put in more operational terms, we can think of risk scenarios as necessitating the application of four risk assessment questions: “What can go wrong? What is the likelihood? What are the consequences?” And “What is the time frame?”³⁵

Within this conceptual universe, we distinguish global and diffuse risks both from one another and from other categories of risks. We focus on these categories of risk to address the prevailing scholarly lacunae, but also because local sources of instability are by now extensively researched.³⁶ Though applied here mainly to the EU’s southern neighbourhood, the definitions and taxonomy we provide can benefit EU anticipatory analysis and preventive action in other ALS. Indeed, to improve predictive capabilities global and diffuse risks ought to be systematically integrated into the predictive models and preventive policies of other international actors concerned to build resilience in ALS around the globe.

Global risks are risks that originate or emanate from identifiable geographical locations outside a given state or region’s immediate neighbourhood. A Supervolcanic eruption, of the type that occurred on Indonesia’s Mount Tambora in 1815 – causing a global cooling of 1°C and crop failure as far away as the United States³⁷ – is a stark example of a global risk. In contrast, *diffuse risks* – such as climate change – are either not geographically contingent or non-territorial in nature, though their impact on different localities is likely to vary. The question of the territoriality of the risk or its absence (i.e. whether its origin can or cannot be located) matters in terms of international legal responsibility but also in that anticipatory analysis and preventive action are more easily directed vis-à-vis risks emanating from identifiable geographical locations.³⁸

The distinction between global and diffuse risks runs through each of the six risk clusters articulated below, and may not always be completely unambiguous. A cyber-attack on critical infrastructure can, for example, be launched by a state, alliance, or non-state actors operating under the loose command and control of a state. Under this scenario, the attack would possess the identifiable geographical markers of a global risk. Yet such an attack may also emanate from hackers utilizing servers across the globe, in which case it will approximate a diffuse risk, not least in terms of a legal culpability challenge.³⁹ Similarly, the sometime blurry line dividing institutionalized from diffuse “lone wolf” terrorism represents a grey-zone, where the distinction between global and diffuse risks can be difficult to mark precisely.⁴⁰

Two framing caveats are pertinent to delineating the boundaries of global and diffuse risks for our purposes. First, global and diffuse risks are not synonymous with *existential risks*, meaning risks that threaten the destruction of humanity’s long-term potential through either extinction or unrecoverable civilizational collapse.⁴¹ Existential risks – such as an asteroid collision or stellar explosion – would extinguish all human civilization, regardless of levels of societal resilience or state-capacity and are therefore analytically redundant in considering risks that “merely” tip areas of limited statehood into governance breakdown and violent conflict.⁴² Lastly, in mapping applicable global and diffuse risks we are, as a rule, temporally bounded to a short to medium-term time horizon of three to seven years. That said, where applicable, we identify risks that require longer-term monitoring and preparedness efforts.

3.1. Geopolitical rivalry and risk of major armed conflicts

The post-Cold War era has been defined, *inter alia*, by the dominance of a “decline-of-war thesis” arguing that major armed conflict among advanced powers is on the decline.⁴³ This optimistic assumption has not only been effectively challenged by recent empirical analysis⁴⁴ but the risk of the return of major armed conflict between great powers markedly increased over the past several years due to the combination of three main trends. First, and most consequentially, U.S-China rivalry has now deteriorated to a point where the strategic postures of both global giants include not only intensive preparations for Multi-Domain Operations against one another, but also the real possibility of direct military confrontation.⁴⁵ Second, the resurgence of Great Power rivalry – notably between China and India, and between the US and China, Russia, Iran and North Korea – has precipitated a new global arms-race and the claiming of clashing spheres of influence, especially in the Caucasus, Central Asia, North Africa, and the Middle East.⁴⁶ Lastly, internationalized civil wars – internal conflicts in which other states, or their proxies, intervene militarily on one or both sides in violation of the norms of sovereignty – are on the rise. Indeed, whereas in the mid 1990s only 4 per cent of civil wars involved external intervention, by 2017 the proportion increased tenfold to 40 per cent.⁴⁷ Cumulatively, the new geopolitical rivalries heighten the risk of Great Power military conflict and make a growing number of areas of limited statehood into arenas contestation in which clandestine operations and support for violent non-state actors undermine local resilience, threaten local leadership, and increase the risk of conflict.⁴⁸

3.2. Unconventional security risks

Unconventional security risks stand out as potential triggers of governance breakdown or the onset of violent conflict in areas of limited statehood surrounding the EU. One prominent risk stems from the pernicious combination of limited statehood and entrenchment of violent non-state actors – such as al-Qaeda in the Islamic Maghreb (AQIM) and Boko Haram – in the Middle East, North Africa and the Sahel.⁴⁹

Most consequential in terms of the immediacy, severity and duration of impact are risks associated with the use of weapons of mass destruction (WMD), notably nuclear or biological. A significant nuclear event in particular – whether caused by war or major accident at the hands of a state, non-state actor, or illicit network⁵⁰ – would produce highly destabilizing effects both locally and globally. Local effects would include the devastation of detonation sites and resulting fires, but also sudden large migration waves as populations seek to flee radioactive areas.⁵¹ Global effects would be more severe still, involving radioactive and firestorms dust spread over vast areas and widespread food contamination and crop failure.⁵² These risks have increased significantly over the past decade, as key arms-control mechanisms – such as the Intermediate-Range Nuclear Forces (INF) treaty – have been undermined, nuclear arsenals are being rebuilt, and new disruptive stealth, hypersonic, and unmanned delivering platforms risk upsetting the strategic balance between nuclear powers.⁵³ Moreover, the proliferation of WMD technologies to state and non-state actors exponentially increases the risk of accidents, strategic-miscalculation, and conflict escalation.⁵⁴

A further illustration of emerging unconventional security risks come from the field of cyber-coercion. These are cyber-attacks on Supervisory Control and Data

Acquisition (SCADA) networks of critical infrastructure in vulnerable neighbouring states, notably nuclear plants, electrical-grids, dams, ports, emergency-response systems, and strategic military installations. The disruptive effects of SCADA breaches were dramatically demonstrated over the past several years by, *inter alia*, a series of attacks on critical infrastructure systems in Georgia, Ukraine, Estonia and Sweden, all attributed to Russia,⁵⁵ and by Iran's repeated attacks on Saudi Arabia's ARAMCO – which put 10 per cent of the world's oil-production capacity at risk.⁵⁶ Cyber-attacks on critical infrastructure may set off a chain of events leading to governance breakdown – as in a scenario where Egypt's Aswan and Esna dams, which deliver the majority of Egypt's electricity supply, are paralyzed – but are more likely to produce escalatory conflict, as the victim responds in kind or with kinetic force.⁵⁷

3.3. Environmental and biological risks

Alongside military, terrorism, and cyber threats, states and international organizations are increasingly bringing environmental and biological risks (natural and anthropogenic) into their core security postures. In the US, for example, climate change has been recognized as “an urgent and growing threat” to national security that contributes “to increased natural disasters, refugee flows, and conflicts over basic resources like food and water”.⁵⁸ “All types of severe weather” have been brought under the competence of the Department of Homeland Security.⁵⁹ Similarly, the COVID-19 pandemic is likely to spur calls for a significant reorientation of US and European defence towards a broader human-security approach, with a focus on health security.

Climate change adds multiple overlapping stressors that can heighten existing socio-economic vulnerabilities and intensify tensions, but our understanding of how these factors interact remains embryonic.⁶⁰ Competition over scarce water resources – such as the one caused by the retreat of Lake Turkana, as explained below – has been singled out as a factor triggering cross-border conflicts.⁶¹ Rapid-onset environmental disasters like floods or earthquakes appear to pose a more significant risk of violent civil conflict than slow-onset disasters, such as desertification.⁶² More broadly, recent warnings estimate that a 2°C rise in global temperatures would increase the risk of armed conflict by 13 per cent⁶³ and that regions in the EU's southern neighbourhood – sub-Saharan Africa, the Sahel, Middle East, and North Africa – are most vulnerable to the combined effects of fragility and climate risks.⁶⁴ In addition, rapid uncontrolled urbanization, which is especially severe in sub-Saharan Africa and parts of the Middle East, exacerbates water and food insecurity, and has been identified by the UN and USAID as heightening the risk of terrorism, insurgency, and civil war.⁶⁵

The historically unprecedented combination of human population density, industrial farming, and global interconnectedness, has produced substantial rise in risks emanating from biological pathogens. Evidence suggests that diseases are crossing over from animal into human populations at an increased rate⁶⁶ and that “we might expect more new pandemics, for them to spread more quickly, and to reach a higher percentage of the world's people”.⁶⁷ The impact of the spread of infectious disease on societal resilience and contemporary conditions of conflict, remains poorly understood and begs future examination. Peterson identifies three mechanisms by which the spread of infectious disease may provoke the onset of conflict: by influencing the relative balance of power among adversaries, generating disputes over public security and public health policies, and engendering domestic instability.⁶⁸ Blame for

the cause or spread of the disease is also likely to breed xenophobia, put religious and ethnic minorities at risk of violent attacks, and exacerbate geopolitical tensions.⁶⁹

3.4. Demography and displacement risks

Large-scale internal displacement and cross-border migration represent prominent risk factors in the onset of violent conflict and acute political instability, particularly when combined with poverty and the perceived upsetting of existing religious or ethnic balance in a fractured society.⁷⁰ Moreover, illicit migration creates substantial opportunities for criminal and terrorist networks, fuelling insurgencies, undermining state-capacity and legitimacy, and thus heightening the risk of conflict in source and go-through areas.⁷¹ While actual migratory patterns are shaped by multiple interactive factors, emerging demographic realities in Europe, Africa and the Middle East, point to powerful migratory incentives from the latter to the former.⁷²

Growing demographic disparities – continued large increases in youthful populations in Africa and the Middle East, aging and demographic decline in Europe – are compounded by existing gaps in wealth and other predictors of human wellbeing, such as investment in education, infrastructure, and health. The lack of social and economic opportunities, coupled with poor governance, population density, and the effects of climate change, are expected to generate powerful “push” south–north migratory dynamics over the coming decades.⁷³ Geography, colonial-era ties, and the presence of existing kin communities in countries of destination, all point to Europe as the most likely destination for large-scale uncontrolled migration emanating from the EU’s southern neighbourhood.

3.5. Global financial and economic risks

The past decade has witnessed two global economic crises whose severity is matched only by the Great Depression of the 1930s. The global financial crisis of 2008–2010 and the ongoing COVID-19 pandemic crisis have contributed to reduced trust and heightened political polarization even in erstwhile consolidated democracies – at times driving protest movements, violent and non-violent, across the world. In addition to the still uncertain medium-term economic implications of the COVID-19 pandemic, recent IMF and OECD forecasts suggest that EU risk analysts ought to be particularly watchful of the growing trade tensions and technology-transfer restrictions between the US and China,⁷⁴ as well as globally ballooning corporate debt.⁷⁵

The relationship between economic shocks and the onset of violent conflict and governance breakdown is nuanced, but generally pernicious. While there is no strong empirical relationship between the size of the economy and the propensity to fight,⁷⁶ poor countries are substantially more likely to suffer both civil wars and acute political instability.⁷⁷ Civil wars are also significantly more likely to occur when countries suffer negative income shocks, for three main reasons. First, increased poverty rates reduce the opportunity costs of fighting. Second, elite-popular tensions, competition over resources, and incentives for state capture and predation all increase in times of sharp economic downturns.⁷⁸ And third, as Chassang and Miquel demonstrate, while an economic crisis reduces the size of the pie for all, the reduction is not equally distributed and the prize of victory does not diminish at the same rate.⁷⁹ Potential insurgents know that the value of lootable resources – such as land or mineral

reserves – is reduced by the economic shock, but that upon victory they will gain control over assets whose value will increase with time. While the capacity of the state to co-opt or suppress violent challengers diminishes during economic crisis, the incentive for violent challengers to seek to seize lootable assets increases relative to the general population, thus increasing the risk of rebellion and conflict.

3.6. Technology-driven disruption

A forward-looking risk typology must, finally, cover a cluster of emerging technologies whose development and proliferation carries far reaching societal disruption potential. One discrete type of new technologically-enabled risk – cyber-attacks on critical infrastructure – has already been noted under risk cluster 2, but emerging technology-driven disruption is a qualitatively distinct risk-cluster, going well beyond unconventional security risks. Notable subcategories within this last main risk cluster include: unaligned Artificial Intelligence (AI), genetic engineering, transportation and industrial automation, and “deep-fake” disinformation technologies that threaten to fundamentally undermine epistemic security, and therefore governmental legitimacy and societal trust. Some of these technologies – such as general intelligence AI⁸⁰ and the widespread use of genetic engineering⁸¹ – are estimated to still be some two to four decades away, though the timing of technological breakthroughs and their maturation are notoriously unpredictable. Yet other technological disruptors are effectively already here. They amount to what Wucker calls “Grey Rhino” phenomena – highly probable, high impact risks that occur after a series of warnings, but which decision-makers typically ignore until it is too late.⁸²

Two examples are instructive in this context. First, according to a series of recent McKinsey reports, by 2030 half of all the activities people are paid to do globally could theoretically be automated. Very few occupations – less than 5 per cent – consist of activities that can be fully automated, yet in about 60 per cent of occupations, at least one-third of the constituent activities could be automated, implying disruptive workplace changes for workers. Mid-tech countries that are highly reliant on agricultural and low-skill industrial production – such as Egypt, India, Indonesia, Nigeria, and South Africa – could experience rapid and substantial job losses to automation.⁸³ Lastly, AI already has the potential to supercharge Great Power rivalry and the disruptive capacity of non-state actors through cyber-attacks, disinformation campaigns, political influence, and illicit finance. Unlike in the conventional military space, the US and Europe are currently ill equipped to respond to such AI-driven asymmetric warfare (ADAW) in the information space.⁸⁴ The EU could find itself weakened by AI-supported soft power. Tensions could arise among member states as to what an appropriate response might be to unverified threats or events, undermining the organization’s unity and information-sharing processes and trust between allies.⁸⁵

4. Tipping points

Global and diffuse risks do not invariably produce governance breakdown or violent conflict. Only when a tipping point is reached – i.e. when societal resilience falls below a minimal threshold necessary to withstand the impact of global and diffuse risks – will such risks materialize into threats of governance breakdown or violent conflict (see also the introduction to this Special Issue). Empirically, this depends on

the complex interaction between the various clusters of risks identified in Part II. Analytically, understanding tipping-points requires a fuller, more nuanced definition of the concept than the one currently found in the literature.

Existing definitions of tipping points generally portray them as visible, high-impact events. While Straus defines them as “specific events, occurrences ... sparks”, Scheffer refers to “abrupt events”.⁸⁶ Nathan emphasizes their sudden, unexpected nature: they “seem to come closer and closer but do not occur, even when all the conditions are ripe – until suddenly they do”.⁸⁷ Nutall similarly treats tipping points as “a phenomenon or rare event that becomes more common”.⁸⁸ Tipping points have also at times been conceived as factors that disturb existing equilibria in irreversible ways.⁸⁹

Our examination reveals that tipping points do not always occur visibly or suddenly – and points to the existence of two additional archetypes: what we call *cascading* and *layered* tipping points. These are characterized by “lack of drama”. They crystalize as the result of a series of knock-on effects or the incremental accumulation of small changes that are individually almost imperceptible outside a watchful prism.

Policymakers should therefore prepare to manage three distinct species of tipping points in areas of limited statehood: (1) *one-time events*; (2) *cascading*; and (3) *layered*.

Although our three archetypes of tipping points cannot predict specific societal outcomes with absolute certainty, they do point to a range of events, trends, and dynamics likely to precipitate threats within varying timeframes. Policymakers should accordingly monitor not only for the risk of sudden natural or anthropogenic disasters, but subtle causal chains or the slow accumulation of layered risk factors. This insight is consistent with the latest research on predicting violent conflict, which has focused on identifying factors likely to lead to conflict, without stretching ambition to mathematical certainty.⁹⁰ As the analysis below shows, policymakers should pay particular attention to non-linear interactions between seemingly disparate global and diffuse risks, such as demographic pressure, climate vulnerability, and rapid urbanization.

Each of the six risk clusters identified in part II of this article may interact in a myriad of ways to produce one of three types of tipping points. By integrating the six risk clusters with the three types of tipping points, we demonstrate how different risk clusters can precipitate distinct types of tipping points through varying modes of complex interactions. [Figure 1](#), and the ensuing discussion provide illustrative examples of how clusters of global and diffuse risks can interact to precipitate tipping points, turning risks into threats.

4.1. Type 1: tipping point: one-time events

Type 1 tipping points are high-visibility, high-impact events, where “the system shifts abruptly from one state to another”.⁹¹ They typically have a low probability of occurrence, but their immediate impact is high, producing a sense of shock in affected communities. One-time events include high-profile leader assassinations (cluster 1), external attacks (cluster 2), or devastating geological occurrences such as a powerful earthquake or storm (cluster 3). The assassination, accidental death, or illness-induced incapacitation of a national leader in a non-democracy (particularly a vulnerable monarchy) is an archetypal example of a Type 1 tipping point. From the assassination of Archduke Franz Ferdinand in Sarajevo in June 1914, to the death of Marshal Tito in Ljubljana in 1980 or the rapid ailing of Mohammad Reza Pahlavi in Iran in

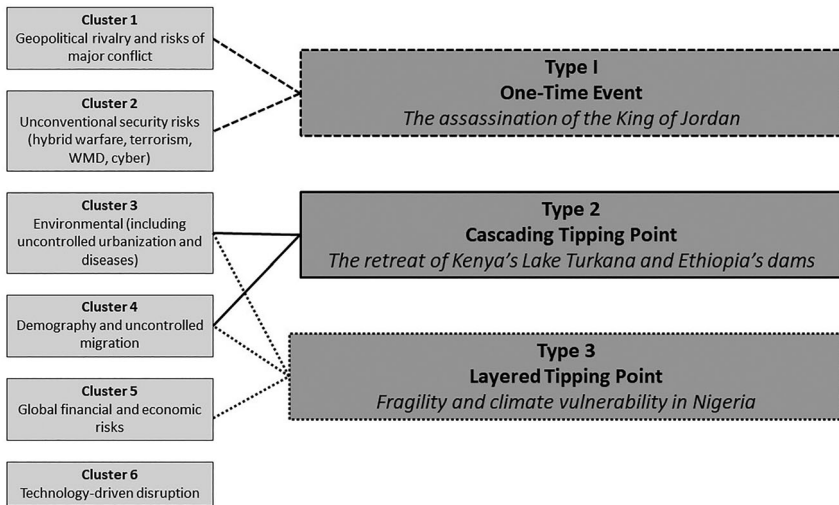


Figure 1. Potential Interactions between Global and Diffuse Risks and Tipping Points.

1979, history suggests that the incapacitation of a leader in a structurally vulnerable non-democratic regime often precipitates a succession crisis that can readily tip into violent conflict and governance breakdown.

In surveying the EU's southern neighbourhood today, EU risk analysts would, under this category, evaluate the potential consequences of the sudden demise of figures such as King Abdullah II of the Hashemite Kingdom of Jordan. In such a situation, as shown in Figure 1 above, a Type 1 tipping point would be produced by the interaction of clusters 1 (geopolitical rivalry and risks of major conflicts) and 3 (unconventional security risks). As an ALS operating in a fragile equilibrium between the continuity of a tribal-based monarchical regime supported by external aid, on the one hand, and highly-destabilizing socio-economic and political dynamics threatening to unravel the Kingdom, on the other,⁹² Jordan's structural vulnerabilities makes it difficult for the country to withstand such risks. The Kingdom lacks any major natural resources, suffers from permanent water and energy-resource scarcity, and is unable to generate sufficient domestic tax revenues to sustain itself.⁹³ It operates as a semi-rentier state in which the monarchy distributes externally derived funds and other material resources – such as jobs in foreign-funded NGO's – in a clientelist manner among the Bedouin tribes.⁹⁴ In return for this patronage, the tribes provide a measure of security and political support.⁹⁵ Added to these structural vulnerabilities are severe bad-neighbourhood effects, with the country bordering Iraq and Syria, separated by a thin strip of sea from the Sinai Peninsula (itself a restive hotbed of Salafi-Takfiri jihadism), and embroiled in Palestinian affairs and the broader Arab-Israeli conflict.

The Jordanian “authoritarian pact” is under considerable strain. The influx of refugees from Iraq and Syria has stretched the limited capacity of the state to provide patronage, forcing Jordan to reduce subsidies and increase taxes.⁹⁶ The erosion of tribal discipline could contribute to undermine societal resilience and destabilize the country.⁹⁷ King Abdullah has sought to bolster state resilience and limit the loss of governance capabilities by introducing largely cosmetic political reforms and seeking

more aid from external actors.⁹⁸ At the same time, the King has employed a “discourse of fear”,⁹⁹ pointing to chaos in Iraq and Syria and presenting himself as a beacon of stability. The sudden demise of the King – as the result of targeted assassination by an external actor for example – would leave Jordan’s fragile equilibrium in tatters, turning risk into a genuine threat in this vital buffer-state in the eastern Mediterranean.

4.2. Type 2: cascading tipping points

Cascading tipping points differ qualitatively from type 1 tipping points in that they do not amount to an “event” *per se* and are more difficult to detect in real time. The distinction lies both in the visibility of the event and its relationship to the ultimate outcome. Cascading tipping points “result from the accumulation of a gradual and incremental change”.¹⁰⁰ What characterizes cascading tipping points are (and what distinguishes them from Type 3 tipping points) are identifiable causal chains that ultimately overwhelm societal resilience. It is important to emphasize that cascading tipping points are not synonymous with cascading risks. The latter are referred to in the literature as “systemic accidents” or “toppling dominos” that “originate with a primary trigger”¹⁰¹ and that result in “extreme disasters capable of generating widespread losses”.¹⁰² In contrast, the concept of a cascading tipping point refers specifically to a series of incremental, often subtle knock-on effects that, if left unchecked eventually overwhelm societal resilience, turning risks into genuine threats of governance breakdown or the onset of political violence. Cascading tipping points, therefore, do not result automatically, or even directly, from an identifiable primary trigger, do not necessarily culminate in some extreme disaster, and not every cascading risk would necessarily precipitate a tipping point.

Consider a governmental decision to increase taxes or cut food or fuel subsidies in the wake of a sharp economic downturn, in a fragile state like Lebanon, Jordan or Sudan (cluster 5). The decision provokes mass demonstrations and strengthens potential insurgents. In a miscalculation, the regime reacts with a violent crackdown on protestors by security forces, which in turn shifts popular support to a galvanizing insurgency, tipping the country into violent conflict. Each event in itself is insufficient to break the existing social pact, but the cumulative actions, reactions, counteractions, and unintended consequences does.¹⁰³ Severe socio-economic vulnerabilities – notably a high rate of youth unemployment, pre-existing ethnic fissures, and prevailing corruption and mistrust – serve as exacerbating factors.¹⁰⁴

The tensions over water resources at the border between Kenya and Ethiopia (which have also heightened tensions between Ethiopia and Egypt) further illustrate how global and diffuse risks – here extreme weather (cluster 3) and migratory pressures (cluster 4) – exacerbate inter-ethnic tensions and eventually produce a cascading tipping-point. The cascading dynamic began with the gradual retreat of Lake Turkana, in Northern Kenya, which crosses into Ethiopia. Ethiopians living in the border regions have “followed” the lake into Kenya as the latter is indispensable to their flood-retreat method of farming. The entry of Ethiopians into Kenya left Kenyans feeling like “refugees in their own land”, creating tensions between the populations living near the border and competing for already scarce resources.¹⁰⁵ Conflict in the region has taken the form of raids and attacks in the delta and lake margins.¹⁰⁶ The construction of a hydroelectric dam by Ethiopia on the Omo River, which feeds the lake, has further altered the pattern of water distribution, hurting fishermen and

exacerbating tensions.¹⁰⁷ Gibe III, as the dam is known, could tip the region into violent conflict, as could Egyptian-Ethiopian conflict over the Nile River basin. In this climate-vulnerable region, ecological and hydrological changes have “cascading effects on livelihoods, patterns of migration, and conflict dynamics”.¹⁰⁸

4.3. Type 3: layered tipping points

Whereas cascading tipping points involve a series of identifiable causal chains, layered ones are characterized by shifting conditions that may reveal no intuitive patterns of causality and might easily be dismissed as individually unimportant or cumulatively unconnected. In reality, both cascading and layered tipping points result from the cumulative effects of various processes and occurrences. Yet whereas in cascading tipping points risk analysts can pinpoint, and predict certain domino effect patterns, grasping the complex relationships imbued in layered processes is a far greater challenge to risk analysts.¹⁰⁹

The fluid, stealth-like nature of layered tipping points can be illustrated with reference to a scenario outside the EU’s southern neighbourhood, *stricto sensu*, in Nigeria’s cumulative challenges of climate change and uncontrolled urbanization (cluster 3), demographic pressures (cluster 4), and oil-price dependence (cluster 5). In less than a generation, Nigeria’s population grew from 95 to 207 million, with Lagos, the largest city on the African continent, growing at an annual rate of 5.8 per cent.¹¹⁰ The country has witnessed “unplanned and chaotic” rapid urbanization,¹¹¹ factors closely linked by the UN to heightened risks of organized crime, terrorism, and insurgencies.¹¹² Similarly, weak economic diversity and entrenched reliance on oil prices make Nigeria highly susceptible to global economic shocks.¹¹³

Such risks are compounded by the complex interaction between state-fragility, religious and tribal tensions, and accelerating climate vulnerabilities that characterize the Sahel in general, and Nigeria in particular. According to a recent USAID report,¹¹⁴ nearly 41.4 million Nigerians live in high environmental risk areas, the largest pool of people in the world outside India. Northern Nigeria already suffers high levels of food insecurity, seething tensions between Fulani herders and non-Fulani farmers, and an active jihadist insurgency at the hands al-Qaeda in the Islamic Maghreb (AQIM), Boko Haram, and Asnaru.¹¹⁵ Longstanding mismanagement of security, economic, and social conditions, coupled with creeping demographic and environmental stress, make northern Nigeria and its bordering regions in Cameroon, Chad, and Niger, prime illustrations of areas of limited statehood sliding towards a layered tipping point.¹¹⁶

Yemen provides another glaring example of how global and diffuse risks reach a layered tipping point, with devastating outcomes. With few natural resources, fractured tribal-based politics, and repeated external interventions, Yemen has descended into a brutal conflict and a dire humanitarian crisis. Decades of sporadic violence across tribal lines and a growing extremist presence came to a head in 2015, the commencement of a regionalized civil war.¹¹⁷ As pressure points multiplied – a combination of clusters 1, 2, 3, and 4 – societal resilience mechanisms proved insufficiently robust to prevent the downward spiralling of the country.

In the North, the Hashid and Bakil tribal confederations possess strong self-governance mechanisms, and have used their combined forces throughout Yemeni history to influence government policies.¹¹⁸ Inhabitants of the South rely instead on local, tribal

resources – a reality described as “the first line of defence in a resilient system”.¹¹⁹ They are less likely to be members of a political party than residents of other regions, and less likely to vote than all but one other region of Yemen.¹²⁰ Without government protection or provision of public goods, southern tribes are responsible for their own safety and subsistence.

The vertical trust relationship, whereby the sheikh is beholden to the elders of each village belonging to the tribe, which are in turn beholden to their constituents, has however not been sufficient to withstand Yemen’s accumulating stressors. The state fails to provide basic services to its population: only 55 per cent of the country has access to potable water, 47 per cent have access to electricity, and 75 per cent of the population relies on external humanitarian assistance.¹²¹ As in Nigeria, the situation has been incrementally worsened by Yemen’s explosive demographic growth, population moves from rural to urban areas, and climate change.¹²² Both countries suffer from a range of vulnerabilities that interact in complex and still opaque ways.

Cascading and layered types reveal that tipping points do not necessarily manifest themselves as one-time occurrences or visible events. They highlight the importance of understanding the underlying causal relationships between different global and diffuse risks, and their interaction with structural vulnerabilities. Unlike cascading tipping points, which are more amendable to scenario predictions, layered tipping points are often characterized by non-linear, non-sequential causality that necessitates specialized observation and analysis on the part of risk analysts. Indeed, at the policy level, the cases of Jordan, Nigeria/Sahel, or Yemen underscore the need to consider the interaction between the cumulated vulnerabilities as part of a holistic strategy. A piecemeal approach – focusing on each vulnerability independently – is likely to overlook the impact of their combined effects and miss the crystallization of risks into threats.

5. Conclusion

Existing explanations of the onset of violent conflict and governance breakdown in ALS have overwhelmingly attended to local conditions and immediate “bad neighbourhood” effects, neglecting global and diffuse risks. This neglect represents a fundamental analytical omission and comes with substantial policymaking costs for the EU, as well as other international actors seeking to develop long-term resilience-building strategies. It undermines our understanding of the causes of violent conflict and governance breakdowns, but also hampers the ability of decision-makers to appraise the degree of societal resilience in vulnerable ALS. Societal resilience itself cannot be evaluated independently from the risks it is supposed to contend with. Those risks must be clearly mapped and factored into any future EU anticipatory analysis and preventive action. Accordingly, this study has made the case for the systematic integration of global and diffuse risks into explanatory theories of governance breakdown and the onset of violent conflict (the main outcome of interest in this all contributions to this Special Issue) and articulated a six-cluster typology of such risks. Our main aim in this context has been one of framing and illustration. Our typology is deliberately suggestive and provocative, and the six risk clusters we delineate invite future engagement.

Analysing global and diffuse risks that threaten to overwhelm societal resilience in ALS, moreover, allowed us to develop the undertheorized concept of tipping points, and begin to demonstrate how the concept relates to different risk clusters. The

study finds that different risk clusters produce markedly different types of tipping points, some of whom are counter-intuitive. We distinguished between three types of tipping points, only one of which – what we call *one-time event* tipping points – aligns with common perceptions. Our analysis of risks led us to define two additional archetypal categories of tipping points – *cascading* and *layered* respectively.

These findings have direct ramifications for those entrusted with the task of fostering fuller and more effective predictive analysis and preventive action. In a world defined by unprecedented connectivity and complex interactions, actors seeking to anticipate conflict and engage in resilience-building require a fuller toolkit for risk analysis and prediction.^{12,3} Strengthening the capacity of societies, communities, and individuals to withstand the various global and diffuse risks we identified can minimize threats to local population and, indirectly, the EU itself. At the same time, our findings suggest, any resilience-building strategy that approaches risks as separate silos is doomed to overlook looming tipping points. The impact of global and diffuse risks depends ultimately on the degree of societal resilience that local and external actors can generate in order to achieve peaceful adaptation, or at least coping. Future research and policy work in the areas of risk prediction and preventive action ought to focus on the complex interactions that produce cascading and layered tipping points in particular, as they are crucial to bolstering societal resilience and therefore the avoidance of chaos and conflict.

Notes

1. Podder, “Mainstreaming the Non-State in Bottom up State-Building”.
2. See: Börzel and Risse, *Effective Governance under Anarchy*.
3. See e.g. Lynch, *The New Arab Wars*; Worth, *A Rage for Order*; Kuru, *Islam, Authoritarianism, and Underdevelopment*; Springborg, *Political Economies of the Middle East and North Africa*.
4. The terms “governance breakdown” and “violent conflict” are defined in detail in the introduction to this Special Issue pg. [15].
5. See e.g. Lynch, *The New Arab Wars*; Worth, *A Rage for Order*.
6. On the EUGS see High Representative of the Union for Foreign Affairs and Security Policy, “Shared Vision, Common Action”. On the Global Fragility Act see H.R.2116 – Global Fragility Act, 116th Congress (2019–2020).
7. On EU democracy promotion vis-à-vis its eastern and southern neighbourhood see e.g. Youngs, “The European Union and Democracy Promotion in the Mediterranean”; Magen and Morlino, *International Actors, Democratization, and the Rule of Law*; Lavenex and Schimmelfennig, “EU Democracy Promotion in the Neighbourhood”; Can Hüllen, “Negotiating Democracy with Authoritarian Regimes”. On the shift towards resilience-building in EU foreign policy see: Juncos, “Resilience as the New EU Foreign Policy Paradigm”.
8. Our italics. Introduction to this special issue, pg. 7.
9. Ibid. Three categories of outcomes are possible: peaceful change, continuity, or governance breakdown/violent conflict.
10. Ibid., 14. Italics added.
11. Ibid., 15.
12. Ibid., 13.
13. See authors XYZ in this special issue.
14. Cederman and Weidmann, “Predicting Armed Conflict”.
15. Haimes, “On the Complex Definition of Risk”.
16. Grimm and Schneider, “Predicting Tipping Points”; Straus, “Triggers of Mass Atrocities”.
17. Authors XY in this special issue.
18. See: Cederman and Weidmann, “Predicting Armed Conflict”; Hegre et al., “ViEWS: A Political Violence Early-Warning System”; Bressan, Nygard, and Seefeldt, “Forecasting and Foresight Methods for Anticipating Governance Breakdown and Violent Conflict”.

19. Wimmer and Schiller, "Methodological Nationalism and Beyond".
20. Lawson, *Anatomies of Revolution*.
21. Bostrom, "Existential Risk Prevention"; Ord, *The Precipice*.
22. Hegre et al., "Forecasting in Peace Research"; Bowsby et al., "Predicting Political Instability".
23. Cederman and Weidmann, "Predicting Armed Conflict"; Bowsby et al., "Predicting Political Instability".
24. Pettersson and Eck, "Organized Violence 1989–2017".
25. Cederman and Vogt, "Dynamics and Logics of Civil War".
26. Gurr, *Why Men Rebel*; Borman, Cederman, and Vogt, "Language, Religion, and Ethnic Civil War".
27. Collier and Hoeffler, "Greed and Grievance in Civil War"; Weinstein, *Inside Rebellion*.
28. Goldstone, "Pathways to State Failure," 288.
29. Bosley, "The 'New' Normal".
30. Forsberg, "Transnational Dimensions of Civil Wars"; Cederman and Vogt, "Dynamics and Logics of Civil War"; Lawson, *Anatomies of Revolution*.
31. World Bank, *Strategy for Fragility Conflict and Violence 2020–2025*, 2.
32. Council of the European Union, *Council Conclusions on Security and Defence*.
33. Koenig, "The EU's Strategic Compass for Security and Defence".
34. Lowrance, *Of Acceptable Risk*.
35. Haimes, "On the Complex Definition of Risk," 1651.
36. Authors XYZ in this special issue.
37. Raible et al., "Tambora 1815 as a Test Case".
38. See authors XYX in this Special Issue.
39. Tsagourias, "International Responsibility for Cyber Acts".
40. Spaaij, *Understanding Lone Wolf Terrorism*.
41. Bostrom, "Existential Risk Prevention".
42. Ord, *The Precipice*.
43. Väyrynen, *The Waning of Major War*; Goldstein, *The Decline of Armed Conflict*; Pinker, *Why Violence Has Declined*.
44. Braumoeller, *The Persistence of War*; Fazal and Poast, "War is Not Over".
45. Rudd, "How to Keep U.S.-China Tensions from Sparking to War".
46. Cooley and Nexon, *Exit From Hegemony*.
47. Einsidel, "The Changing Nature of Armed Conflict".
48. Ahmadian and Mohseni, "Iran's Syria Strategy".
49. Walter, "The New New Civil Wars"; Authors XYZ in this special issue.
50. Perry and Collina, *The Button*.
51. Richmond, "Reactive Migration".
52. Ord, *The Precipice*.
53. Zala, "How the Next Nuclear Arms Race will be Different".
54. Perry and Collina, *The Button*.
55. Jasper, *Russian Cyber Operations*.
56. Libicki, "Correlations Between Cyberspace Attacks".
57. Smith, "Cyberattacks as Casus Belli".
58. White House, *National Security Implications of a Changing Climate*, 12.
59. US Department of Homeland Security, "Natural Disasters".
60. Salehyan, "Climate Change and Conflict".
61. Daniel and Michael, "Water Wars on the Nile".
62. Nel and Righarts, "Natural Disasters and Risk of Violent Conflict".
63. Koubi, "Climate Change and Conflict"; Mach et al., "Climate as a Risk Factor".
64. Moran et al., "Global Fragility and Climate Risks".
65. Einsidel, "Changing Nature of Armed Conflict"; USAID, "Sustainable Urbanization for Global Progress and Security".
66. Jones et al., "Global Trends in Emerging Infectious Diseases".
67. Ord, *The Precipice*, 126.
68. Peterson, "Epidemic Disease and National Security".
69. Letendre et al., "Does Infectious Disease Cause Global Variation".
70. Salehyan and Gleditsch, "Refugees and the Spread of Civil War".

71. Einsidel, "Changing Nature of Armed Conflict".
72. Bricker and Ibbitson, *The Shock of Global Population Decline*.
73. Mixed Migration Centre, *Regional Mixed Migration Prospects 2030*.
74. "Global growth outlook 'precarious' amid trade tensions: IMF chief," *Al-Jazeera*, April 9, 2019.
75. Çelik et al., "Corporate Bond Markets in Unconventional Monetary Policy".
76. Fearon, "Economic Development, Insurgency, and Civil War".
77. Fearon and Laitin, "Ethnicity, Insurgency, and Civil War"; World Bank, *Strategy for Fragility, Conflict, and Violence 2020–2025*.
78. Collier and Hoeffler, "Greed and Grievance in Civil War".
79. Chassang and Miquel, "Economic Shocks and Civil War".
80. Russell, *AI and the Problem of Control*.
81. Metzl, *Genetic Engineering and the Future of Humanity*.
82. Wucker, *The Gray Rhino*.
83. McKinsey Global Institute, "Workforce Transitions in a Time of Automation".
84. Polyakova, "Russia and AI-Driven Asymmetric Warfare".
85. Valášek, *How Artificial Intelligence Could Disrupt Alliances*, 2.
86. Straus, "Triggers of Mass Atrocities"; Scheffer et al., "Signals for Critical Transitions".
87. Nathan, "China at the Tipping Point?".
88. Nutall, "Tipping Points and the Human World," 97.
89. Schelling, "Dynamic Models of Segregation"; Gladwell, *The Tipping Point*.
90. Cederman and Weidmann, "Predicting Armed Conflict"; [authors XYZ in this special issue]
91. Scheffer et al., "Signals for Critical Transitions," 53.
92. Köprülü, "Jordan Since the Uprisings"; Ryan, *Jordan and the Arab Uprisings*.
93. Ryan, *Jordan and the Arab Uprisings*.
94. Brynen, "Economic Crisis and Post-Rentier Democratization: Jordan"; Ryan, *Jordan and the Arab Uprisings*.
95. Ryan, *Jordan and the Arab Uprisings*.
96. Ibid.
97. Rodriguez, "Jordan: Constant, Fragile, Stability".
98. Dorsey, "Jordanian Protests".
99. Köprülü, "Jordan Since the Uprisings".
100. Pierson, "Big, Slow-Moving, and ... Invisible".
101. Pescaroli and Alexander, "Understanding Compound, Interconnected, Interacting, and Cascading Risks," 2249.
102. R. Zehra Zaidi, "Beyond the Sendai Indicators," 307.
103. Bosley, "Instability Risk Assessment in an Uncertainty-Based Environment"; Fiott, "Crisis Scenarios, Simulations and Exercises".
104. Bellin, "Reconsidering the Robustness of Authoritarianism in the Middle East".
105. Linke et al., "Human Mobility and Conflict in Kenya".
106. Lamphear, *Turkana Responses to Colonial Rule*; Hodbod et al., "Social-Ecological Change in the Omo-Turkana Basin".
107. Hathaway, "Indigenous Communities of Lower Omo Valley".
108. Hodbod et al., "Social-Ecological Change in the Omo-Turkana Basin".
109. Cederman and Weidmann, "Predicting Armed Conflict"; [authors XYZ in this special issue].
110. Aliyu and Amad, "Urbanization, Cities and Health: Nigeria".
111. Campbell, "Nigeria's Cities Continue to Boom".
112. Einsidel, "Changing Nature of Armed Conflict".
113. World Bank, *Nigeria: Overview*.
114. Moran et al., "Global Fragility and Climate Risks".
115. Zenn, "Boko Haram's Conquest for the Caliphate".
116. Moran et al., "Global Fragility and Climate Risks"; Penney, "Sahel is Vulnerable to Climate Change but also Weak Governance".
117. Lackner, *Yemen in Crisis*.
118. Lewis and Rueschmeyer, *Unstable Governance in Somaliland, Yemen and the Gulf of Aden*.
119. Comfort et al., *Designing Resilience*.
120. Hassan, "Determinants of Civic Engagement and Political Participation: Yemen".
121. Lackner, *Yemen in Crisis*; Day and Brehony, *Dynamics in the Yemen Crisis*.

122. Douglas, “Yemen, Water, Climate Change, and Conflict”; Day and Brehony, *Dynamics in the Yemen Crisis*.
123. Cederman and Weidmann, “Predicting Armed Conflict”.

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Bibliography

- Ahmadian, H., and P. Mohseni. “Iran’s Syria Strategy: The Evolution of Deterrence.” *International Affairs* 95, no. 2 (2019): 341–364.
- Aliyu, A. A., and L. Amadu. “Urbanization, Cities, and Health: The Challenges to Nigeria – A Review.” *Annals of African Medicine* 16, no. 4 (2017): 149–158.
- Bellin, E. “Reconsidering the Robustness of Authoritarianism in the Middle East: Lessons from the Arab Spring.” *Comparative Politics* 44, no. 2 (2012): 127–149.
- Bosley, C. “The ‘New’ Normal: Instability Risk Assessment in an Uncertainty-Based Strategic Environment.” *International Studies Review* 19, no. 2 (2017): 206–227.
- Bostrom, N. “Existential Risk Prevention as Global Priority.” *Global Policy* 4, no. 1 (2013): 15–31.
- Bowlsby, D., et al. “The Future is a Moving Target: Predicting Political Instability.” *British Journal of Political Science* 50 (2020): 1405–1417.
- Bormann, N. C., L. E. Cederman, and M. Vogt. “Language, Religion, and Ethnic Civil War.” *Journal of Conflict Resolution* 61, no. 4 (2017): 744–771.
- Börzel, T. A., and T. Risse. *Effective Governance under Anarchy. Institutions, Legitimacy, and Social Trust in Areas of Limited Statehood*. Cambridge: Cambridge University Press, 2021.
- Braumoeller, B. F. *Only the Dead: The Persistence of War in the Modern Age*. Oxford: Oxford University Press, 2019.
- Bressan, S., H. M. Nygard, and D. Seefeldt. *Forecasting and Foresight Methods for Anticipating Governance Breakdown and Violent Conflict*. EU-LISTCO Working Paper No. 2, 2019.
- Bricker, D., and J. Ibbitson. *Empty Planet: The Shock of Global Population Decline*. New York: New Crown, 2019.

- Brynen, R. "Economic Crisis and Post-Rentier Democratization in the Arab World: The Case of Jordan." *Canadian Journal of Political Science* 25, no. 1 (1992): 69–98.
- Campbell, J. "Home to Over Half the Population, Nigeria's Cities Continue to Boom." *Council on Foreign Relations Blog* (2019). Accessed June 15, 2021. <https://www.cfr.org/blog/home-over-half-population-nigerias-cities-continue-boom>.
- Cederman, L. E., and M. Vogt. "Dynamics and Logics of Civil War." *Journal of Conflict Resolution* 61, no. 9 (2017): 1992–2016.
- Cederman, L. E., and N. B. Weidmann. "Predicting Armed Conflict: Time to Adjust Our Expectations?" *Science* 355 (2017): 474–476.
- Çelik, S., G. Demirtaş, and M. Isaksson. *Corporate Bond Markets in a Time of Unconventional Monetary Policy*. OECD Capital Market Series, Paris, 2019. www.oecd.org/corporate/Corporate-Bond-Markets-in-a-Time-of-Unconventional-Monetary-Policy.htm.
- Chassang, S., and G. Miquel. "Economic Shocks and Civil War." *Quarterly Journal of Political Science* 4, no. 3 (2009): 211–228.
- Collier, P., and A. Hoeffler. "Greed and Grievance in Civil War." *Oxford Economic Papers* 56, no. 4 (2004): 563–595.
- Comfort, L., et al., eds. *Designing Resilience: Preparing for Extreme Events*. Pittsburgh, PA: University of Pittsburgh Press, 2010.
- Cooley, A., and D. Nexon. *Exit from Hegemony: The Unraveling of the American Global Order*. Oxford: Oxford University Press, 2020.
- Council of the European Union. *Council Conclusions on Security and Defence*. Doc 8910/20, June 16, 2020.
- Daniel, B., and W. H. Michael. "Water Wars on the Nile: How Water Scarcity and Middle Eastern Influence Are Reshaping Northeast Africa." *Foreign Affairs*, August issue, 2018.
- Day, S. W., and N. Brehony. *Global, Regional, and Local Dynamics in the Yemen Crisis*. London: Palgrave Macmillan, 2020.
- Dorsey, J. "Jordanian Protests: Revisiting the Arab Spring and Setting a Benchmark." *Begin-Sadat Center for Strategic Studies, Perspectives Paper* 858 (2018): 1–4.
- Douglas, C. "A Storm Without Rain: Yemen, Water, Climate Change and Conflict." *Center for Climate and Security, Briefing* 40 (2016): 1–8.
- Einsidel, S. "Civil War Trends and the Changing Nature of Armed Conflict." *United Nations University Centre for Policy Research, Occasional Paper* 10 (2017): 1–10.
- Fazal, T. M., and P. Poast. "War is Not Over." *Foreign Affairs*, October 15, 2019.
- Fearon, J. D. "Economic Development, Insurgency, and Civil War." In *Institutions and Economic Performance*, edited by E. Helpman, 292–328. Cambridge, MA: Harvard University Press, 2007.
- Fearon, J. D., and D. D. Laitin. "Ethnicity, Insurgency, and Civil War." *The American Political Science Review* 97, no. 1 (2003): 75–90.
- Fiott, D. *Stress Tests: An Insight Into Crisis Scenarios, Simulations and Exercises, Briefs*. Paris: European Institute for Security Studies, 2019.
- Forsberg, E. "Transnational Dimensions of Civil Wars: Clustering, Contagion, and Connectedness." In *What Do We Know About Civil Wars?*, edited by T. David Mason and S. McLaughlin Mitchell, 75–90. Lanham: Rowman & Littlefield, 2016.
- Gladwell, M. *The Tipping Point: How Little Things Can Make a Big Difference*. New York: Little, Brown, 2000.
- Goldstein, J. S. *Winning the War on War: The Decline of Armed Conflict Worldwide*. New York: Dutton, 2011.
- Goldstone, J. "Pathways to State Failure." *Conflict Management and Peace Science* 25 (2008): 285–296.
- Grimm, S., and G. Schneider. "Predicting Tipping Points: Current Research and the Way Forward." *German Development Institute, Discussion Paper*, 8/2011.
- Gurr, T. D. *Why Men Rebel*. Princeton: Princeton University Press, 1970.
- Haimes, Y. Y. "On the Complex Definition of Risk: A Systems-Based Approach." *Risk Analysis* 29, no. 12 (2009): 1647–1654.
- Hathaway, T. "Facing Gibe 3 Dam: Indigenous Communities of Ethiopia's Lower Omo Valley." *International Rivers* (2009): 1–10. http://archive.nowater-nolife.org/watersheds/omo/hydroReports/2009_IR_Gibe3_Communities.pdf.
- Hassan, M. *Determinants of Civic Engagement and Political Participation: A Case Study in Yemen*. Washington, DC: Georgetown University Graduate School of Arts and Sciences, 2014.

- Hegre, H., et al. "ViEWS: A Political Violence Early-Warning System." *Journal of Peace Research* 56, no. 2 (2019): 155–174.
- Hegre, H., et al. "Introduction: Forecasting in Peace Research." *Journal of Peace Research* 54, no. 2 (2017): 113–124.
- High Representative of the Union for Foreign Affairs and Security Policy. "Shared Vision, Common Action: A Stronger Europe." https://eeas.europa.eu/archives/docs/top_stories/pdf/eugs_review_web.pdf.
- Hodobod, J., et al. "Social-Ecological Change in the Omo-Turkana Basin: A Synthesis of Current Developments." *Ambio* 48 (2019): 1099–1115.
- Jasper, S. *Russian Cyber Operations: Coding the Boundaries of Conflict*. Washington, DC: Georgetown University Press, 2020.
- Jones, K. E., et al. "Global Trends in Emerging Infectious Diseases." *Nature* 451, no. 7181 (2008): 990–993.
- Juncos, A. E. "Resilience as the New EU Foreign Policy Paradigm: A Pragmatist Urn?" *European Security* 26, no. 1 (2017): 1–18.
- Koenig. "The EU's Strategic Compass for Security and Defence: Just Another Paper?" *Hertie School Jacques Delors Centre, Policy Paper*, 2020.
- Köprülü, N. "Jordan Since the Uprisings: Between Change and Stability." *Middle East Policy* 21, no. 2 (2014): 111–126.
- Koubi, V. "Climate Change and Conflict." *Annual Review of Political Science* 22, no. 1 (2019): 343–360.
- Kuru, A. T. *Islam, Authoritarianism, and Underdevelopment: A Global and Historical Comparison*. Cambridge: Cambridge University Press, 2019.
- Lackner, H. *Yemen in Crisis: The Road to War*. London: Verso, 2019.
- Lamphear, J. *The Scattering Time: Turkana Responses to Colonial Rule*. Oxford, New York: Clarendon Press, Oxford University Press, 1992.
- Lavenex, S., and F. Schimmelfennig. "EU Democracy Promotion in the Neighbourhood: From Leverage to Governance?" *Democratization* 18, no. 4 (2011): 885–909.
- Lawson, G. *Anatomies of Revolution*. Cambridge: Cambridge University Press, 2019.
- Letendre, K., et al. "Does Infectious Disease Cause Global Variation in the Frequency of Intrastate Armed Conflict and Civil War?" *Biological Reviews of the Cambridge Philosophical Society* 85, no. 3 (2010): 669–683.
- Lewis, A., and M. Rueschemeyer. *Security, Clans and Tribes: Unstable Governance in Somaliland, Yemen and the Gulf of Aden*. London: Palgrave Macmillan, 2014.
- Libicki, M. "Correlations between Cyberspace Attacks and Kinetic Attacks." *12th International Conference on Cyber Conflict*, NATO CCDCOE Publications, 2020.
- Linke, A. M., et al. "The Consequences of Relocating in Response to Drought: Human Mobility and Conflict in Contemporary Kenya." *Environnemental Research Letters* 13 (2018): 094014.
- Lowrance, W. W. *Of Acceptable Risk: Science and the Determination of Safety*. Los Altos, CA: Kaufmann, 1976.
- Lynch, M. *The New Arab Wars: Uprisings and Anarchy in the Middle East*. New York: Public Affairs, 2016.
- Magen, A., and L. Morlino. *International Actors, Democratization, and the Rule of Law: Anchoring Democracy?* London and New York: Routledge, 2009.
- Mach, K. J., et al. "Climate as a Risk Factor for Armed Conflict." *Nature* 571 (2019): 193–197.
- McKinsey Global Institute. *Jobs Lost, Jobs Gained: Workforce Transitions in a Time of Automation*, 2017.
- Metzl, J. *Hacking Darwin: Genetic Engineering and the Future of Humanity*. Naperville, IL: Sourcebooks, 2019.
- Mixed Migration Centre. *Regional Mixed Migration Prospects 2030*, 2018.
- Moran, A., et al. *The Intersection of Global Fragility and Climate Risks. Fragility and Conflict Technical and Research Services (FACTRS)*. Washington, DC: USAID, 2018.
- Nathan, A. "China at the Tipping Point? Foreseeing the Unforeseeable." *Journal of Democracy* 24, no. 1 (2003): 20–25.
- Nel, P., and M. Righarts. "Natural Disasters and the Risk of Violent Civil Conflict." *International Studies Quarterly* 52, no. 1 (2008): 159–185.
- Nuttall, M. "Tipping Points and the Human World: Living with Change and Thinking about the Future." *Ambio* 41, no. 1 (2012): 96–105.

- Ord, T. *The Precipice: Existential Risk and the Future of Humanity*. New York: Hachette, 2020.
- Perry, W. J., and T. Z. Collina. *The Button: The New Nuclear Arms Race and Presidential Power from Truman to Trump*. New York, NY: BenBella Books, 2020.
- Peterson, S. "Epidemic Disease and National Security." *Security Studies* 12, no. 2 (2002): 43–81.
- Pettersson, T., and K. Eck. "Organized Violence 1989–2017." *Journal of Peace Research* 55, no. 4 (2018): 535–547.
- Pescaroli, G., and D. Alexander. *Risk Analysis* 38, no. 11 (2018): 2245–2257.
- Pierson, P. "Big, Slow-Moving, and ... Invisible." In *Comparative Historical Analysis in the Social Sciences*, edited by James Mahoney, and Dietrich Rueschemeyer, 177–207. Cambridge: Cambridge University Press, 2003.
- Pinker, S. *The Better Angels of Our Nature: Why Violence Has Declined*. New York: Viking, 2011.
- Podder, S. "Mainstreaming the Non-State in Bottom up State-Building: Linkages Between Rebel Governance and Post-Conflict Legitimacy." *Conflict, Security and Development* 14, no. 2 (2014): 213–243.
- Polyakova, A. *Weapons of the Weak: Russia and AI-Driven Asymmetric Warfare*. Washington, DC: Artificial Intelligence and Emerging Technologies Initiative, Brookings Institution, 2018.
- Raible, C. C., et al. "Tambora 1815 as a Test Case for High Impact Volcanic Eruptions: Earth System Effects." *Climate Change* 7, no. 4 (2016): 569–589.
- Richmond, A. H. "Reactive Migration: Sociological Perspectives on Refugee Movements." *Journal of Refugee Studies* 6, no. 1 (1993): 7–24.
- Rodriguez, L. M. *Jordan: Constant, but Fragile, Stability*. IEMed Mediterranean Yearbook, 2019. https://www.iemed.org/observatori/arees-danalisi/arxiu-adjunts/anuari/med.2019/Jordan_Stability_Fragile_Politics_Luis_Melian_Rodriguez_IEMed_MedYearbook2019.pdf.
- Rudd, K. "Beware the Guns of August – in Asia: How to Keep U.S-China Tensions From Sparking to War." *Foreign Affairs*, August 3, 2020.
- Russell, S. *Human Compatible: AI and the Problem of Control*. New York City: Viking, 2019.
- Ryan, C. R. *Jordan and the Arab Uprisings: Regime Survival and Politics Beyond the State*. New York: Columbia University Press, 2018.
- Salehyan, I. "Climate Change and Conflict: Making Sense of Disparate Findings." *Political Geography* 43, no. 1 (2014): 1–5.
- Salehyan, I., and K. S. Gleditsch. "Refugees and the Spread of Civil War." *International Organization* 60, no. 2 (2006): 335–366.
- Scheffer, M., et al. "Early-Warning Signals for Critical Transitions." *Nature* 461, no. 7260 (2009): 53–59.
- Schelling, T. C. "Dynamic Models of Segregation." *Journal of Mathematical Sociology* 1, no. 2 (1971): 143–186.
- Smith, P. T. "Cyberattacks as Casus Belli: A Sovereignty-Based Account." *Journal of Applied Philosophy* 35, no. 2 (2018): 222–241.
- Spaaij, R. F. J. *Understanding Lone Wolf Terrorism: Global Patterns, Motivations and Prevention*. Dordrecht: Springer, 2012.
- Straus, S. "Triggers of Mass Atrocities." *Politics and Governance* 3, no. 3 (2015): 5–15.
- Tsagourias, N. "Non-State Actors, Ungoverned Spaces and International Responsibility for Cyber Acts." *Journal of Conflict & Security Law* 21, no. 3 (2016): 455–474.
- USAID. Sustainable Urbanization for Global Progress and Security, 2017. <https://www.usaid.gov/urban>.
- US Congress. Global Fragility Act, 2020. <https://www.congress.gov/bill/116th-congress/house-bill/2116>.
- US Department of Homeland Security. Natural Disasters, 2018. <https://www.dhs.gov/natural-disasters>.
- Valásek, T. *How Artificial Intelligence Could Disrupt Alliances*, 2017. <https://carnegieeurope.eu/strategieurope/72966>.
- Van Hüllen, V. "Negotiating Democracy with Authoritarian Regimes. EU Democracy Promotion in North Africa." *Democratization* 26, no. 5 (2019): 869–888.
- Väyrynen, R. *The Waning of Major War: Theories and Debates*. New York: Routledge, 2006.
- Walter, B. F. "The New New Civil Wars." *Annual Review of Political Science* 20 (2017): 469–486.
- Weinstein, J. *Inside Rebellion: The Politics of Insurgent Violence*. Cambridge: Cambridge University Press, 2007.

- White House. *The National Security Implications of a Changing Climate*, 2015.
- Wimmer, A., and N. G. Schiller. "Methodological Nationalism and Beyond: Nation-State Building, Migration and the Social Sciences." *Global Networks* 2, no. 4 (2002): 301–334.
- World Bank. *Nigeria: Overview*, October 13, 2019.
- World Bank. *Strategy for Fragility, Conflict and Violence 2020–2025*, 2020.
- Worth, R. F. *A Rage for Order: The Middle East in Turmoil, from Tahrir Square to ISIS*. New York: Farrar, Straus and Giroux, 2016.
- Wucker, M. *The Gray Rhino: How to Recognize and Act on the Obvious Dangers We Ignore*. New York City, NY: St. Martin's Press, 2016.
- Youngs, R. "The European Union and Democracy Promotion in the Mediterranean: A New or Disingenuous Strategy?" *Democratization* 9, no. 1 (2002): 40–62.
- Zaidi, Z. "Beyond the Sendai Indicators: Application of a Cascading Risk Lens for the Improvement of Loss Data Indicators for Slow-Onset Hazards and Small-Scale Disasters." *International Journal of Disaster Risk Management* 30 (2018): 306–314.
- Zala, B. "How the Next Nuclear Arms Race Will be Different from the Last One." *Bulletin of the Atomic Scientists* 75, no. 1 (2019): 36–43.
- Zenn, J. "Boko Haram's Conquest for the Caliphate: How Al Qaeda Helped Islamic State Acquire Territory." *Studies in Conflict & Terrorism* 43, no. 2 (2020): 89–122.