Estimating State Instability

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The events of the “Arab Spring” that swept the Middle East in early 2011 focused policymakers’ attention on the problem of state instability. As they struggled to catch up to events, more than one lamented the lack of intelligence warning. The president reportedly said he was “disappointed with the Intelligence Community.” (A White House spokesman later denied this was the case.) The chairwoman of the Senate Select Committee for Intelligence added that “these events should not have come upon us with the surprise that they did...there should have been much more warning.” The chairman of the Joint Chiefs of Staff reflected that events had “taken not just us but many people by surprise.”

While right to demand warning, these leaders were wrong to limit the scope of intelligence to warning. Estimative intelligence that was focused on the prospects and likely shape of instability in the region would have helped policymakers develop plans and strategies to respond.

Estimating state instability is more than warning. It is a structured analysis of instability types, their likelihood and potential impact on US national interests, and their most likely and most dangerous manifestations. This kind of analysis goes beyond determining probabilities. It also structures scenarios and evaluates the potential impact of events.

In this article, I introduce a structured, qualitative method for estimating state instability. The first section reviews and critiques existing approaches, identifying their strengths and weaknesses. The second section presents a method for addressing these weaknesses and introduces four analytic tools.

Approaches to State Instability

Government, business, academic, and nonprofit organizations assess state instability with analytic approaches as varied as their goals. These methods, which generally either use quantitative or qualitative approaches, can be both innovative and problematic.

Quantitative

A wide range of predictive and current quantitative models of state instability exist. Notable
predictive models include three developed under government sponsorship: Fuzzy Analysis of Statistical Evidence (FASE—US Army), Integrated Crisis Early Warning System (ICEWS—US Army) and the Political Instability Task Force (PITF—CIA). Models that evaluate current conditions—or indices—are more common. These have ties to government, (Country Indicators for Foreign Policy [CIFP], Canada), business (Political Instability Index, Global Political Risk Index), academia (Index of State Weakness, State Fragility Index), and non-profits (Failed States Index [FSI]).

Several strengths of these approaches enable intelligence support to policymaking. First, some of them are effective. With successful prediction rates of around 80 percent, the three predictive models cited above have enormous potential as sources of warning. Proven success provides credibility and wins the trust of leaders.

Second, these models are comparative and permit leaders and staffs to survey the world quickly for warning signs and to benchmark countries against others, in the region or in the news. Clear plots over time provide for longitudinal comparison and intuitive pattern recognition. And the tables and maps of CIFP, ISW, or FSI, for example, make comparisons visually appealing, informing policy discussions without bogging them down in methodology.

Last, numbers allow precision. Policymakers and their staffs feed on details. The identification of a 10-percent decline is more helpful than a judgment of “decreasing” stability; a 60-percent risk is more concrete than “likely.” The precision of these models has the potential to raise the impact and effectiveness of intelligence.

Unfortunately, the quantitative models’ weaknesses inhibit their use as intelligence tools to support policymaking. First, these models are limited to warning. The best among them predict instability; the rest measure vulnerability. Neither of these helps leaders think through the shape, scale, or pace of the threat presented by a potential instability crisis. These models are all probability and no impact.

Second, they can be misleading. Policymakers paying attention to the recent history of popular current stability indices, for example, could not have anticipated that instability would sweep across the Middle East. As the table on the facing page shows, four current indices buried countries like Tunisia, Egypt, Libya, and Syria beneath at least 30—but sometimes as many as 100—others in rankings from 2007 through 2010.

Third, too few pass the “warm Pepsi test:” the imperative to provide information that cannot be gained from a sharp undergraduate in exchange for a warm Pepsi. The top 10 countries to worry about are no surprise to leaders, who do not need complex models to recognize the fragility of Somalia, Iraq, or Burma.

Last, they are generic, privileging uniform scholarship over a tailored case-specific relevance. The models approach different types of states in the same way. Policymakers are asked to accept work that grades Ireland and Iran using the same score sheet. Moreover, none of the models consider the importance of unstable states to the national interest of the United States or its allies.

Overall, these weaknesses keep quantitative models of state instability out of most important decisions. Where they are effective and included, their impact is limited to warning. To date, quantitative approaches have helped to sound alarms, but not to develop policies, plans, or strategies to address potential crises.
Qualitative

Although several structured qualitative approaches to estimating state instability exist, explicitly predictive frameworks are rare. Outside of government, analogy-based and Delphi forecasts are relatively common. Most measure the vulnerability of systems (trends), and some assess events that might overwhelm particular systems (triggers). Within government, these include Indicators (CIA), Strategic Conflict Assessment (UK), and the Stability Assessment Framework (Netherlands).

The strengths of this group have earned its products an ear with policymakers. First, the approaches are intuitive in ways that complicated models are not. It is easier to connect a forecast of stability with trends than with a statistical measure like infant mortality rate, for example. It is also harder to believe a quantitative warning of instability that does not consider case-specific dynamics like grievances or actors. This intuitive advantage of the qualitative models enables leaders to use such products more effectively in interagency or public debate. Policymakers need to be able to do more than cite abstract stability scores.

Second, the qualitative models are adaptable. A trends-and-triggers approach is like Velcro; it sticks to everything from provinces to states to regions. It can be made to fit different regime types, economic models, and ideologies. This ability to integrate the unique traits of its subject raises this method’s credibility with policymakers. Further, case-specific details can teach leaders as well as warn them. A Strategic Conflict Assessment of Venezuela, for example, will leave its reader knowing more about the country than a glance at the country’s PITF or FSI rating.

Finally, qualitative approaches play to the strengths of most intelligence agencies, which are long on country experts, but short on statisticians. They also reduce the practical challenge agencies face in quality control. Adherence to structured qualitative approaches requires only discipline because analysts already have the required skills. In contrast, adopting quantitative models may impose significant new training demands.

This group also has weaknesses, however. First, these methods still do not move far beyond probability. Trends and triggers can be combined to estimate the likelihood of instability and perhaps the shape of its onset. After that, the lights go dark. The general estimative judgments needed for planning—scenario types, scale, and course; regional responses; and consequences—tend to be absent. A generic warning of instability in Libya, for example, would not have helped Western governments prepare policy options for its breakdown in early 2011. Libya’s path would have remained a mystery: Would the crisis move toward repression, coup, civil war, or something else?

Second, this weakness is compounded by a tendency to encourage analysis focused more on the past than on the future. These approaches outline sophisticated ways to plot past trends and to identify potential future triggers, but they do not provide a logic to guide the combination of the two into a forward-looking judgment of probability. Their force fades quickly as judgments move into the future.

In the end, however, the balance of benefit between quantitative and qualitative approaches hinges on the abil-
The balance of benefit between quantitative and qualitative approaches hinges on the ability of each to produce estimative judgments. Of the two, structured qualitative approaches show more promise.

Estimating State Instability

This section introduces a method that resolves the weaknesses of current structured qualitative approaches to estimating state instability. It builds on theory, joins trends and triggers into a logic of probability, and results in judgments able to inform policy, plans, and strategy.

The method is a framework, not a formula. It structures analytic processes to facilitate transparency and debate, generate wider considerations, and permit assumptions checks. It still leaves the analysis in the hands of analysts. Only its users can provide the expertise needed to make it work.

The method works within a behavioral understanding of political stability, which is focused on acts, roles, regularity, and gaps. An act is political to the extent that it influences the distribution of power within a state. But its meaning—stabilizing or destabilizing—rests in its relationship to its context, specifically, formal and informal roles (“Does the act violate legal or social expectations?”) and regularity (“Does the act break from its own past patterns?”). To a greater or lesser degree, role-breaking or irregular acts represent occurrences of instability; they challenge rather than affirm the distribution of power within a state.

While current intelligence might focus on the occurrence of role violations, estimates must look at their potential. The behavioral definition of instability is focused on potential.

Political stability is the degree to which the formal and informal coincide.... When the formal roles and structures set by authority match those constructed by informal social interaction, an object is stable. When either set of roles or structures change so they conflict, an object is unstable to some degree.... Perfect stability is total correlation; perfect instability, the total absence of correlation.

The size of the gap between formal and informal roles fairly represents a state’s potential for instability. This is the correspondence between law and custom, between the expectations of the state and the expectations of society. When divided, they place people and institutions in tension and set one role against another, making disruptions more likely.

Governments and societies usually narrow this gap through four stabilizing dynamics that work to realign formal and informal roles.

• The state can enforce its set of roles on society by using its authority. It may pass laws and enforce them with security forces, for example.

• The state can reform its roles to match society through resilience. It may change laws in response to social pressure, for example, or expand its role suddenly to respond to urgent needs in a crisis.

• Society can recognize and accept the roles set by the state through legitimacy. It may accept new challenges such as taxes or rationing, for example, out of a belief in the state’s right to rule on such matters.
• Society can enforce its set of roles on the state by attempts at replacement. It may reject incumbents at the polls, for example.

The failure of these four stabilizing dynamics does not automatically lead to instability events, however. Often, opportunity is also needed to convert existing tension into acts of instability. Beyond the gap, some social, economic, and environmental conditions correlate highly with acts of instability. They are not causes, but they are key enablers.16

Three of these four stabilizing dynamics lend themselves to analysis as scenario types and trends: authority, resilience, and legitimacy. Their development over time determines a country’s vulnerability and the shapes of potential instability crises. (International events matter to the extent that they influence these three trends.) Opportunity is important as an additional consideration.

Scenario types
The needs of leaders require disaggregating the elements of instability. Too often, analysts lump together crises that policymakers never would—coup and protests, for example, or civil war and genocide.a 17 Different instability crises imply different policy responses. Intelligence assessments should provide insight into these different types of crises.

Generic scenario types are more helpful than detailed forecasts. Specific futures are endless, with details certain to be situation-dependent. In contrast, generic scenario types can capture sets of expectations while remaining flexible and allowing for structured estimates of impact.

Three policy-relevant types of instability are important. Each assumes a failure of one trend, or stabilizing dynamic. While the model identifies four, three are acute and would be likely to challenge US policy.b

• First, a crisis of authority refers to a state’s inability to enforce its rule. Here, a state cannot control all of the area or enforce all of the laws it claims. Though not exclusively, this often emerges from elite-level dynamics, e.g., leadership weakness or divisions. Coups d’état, secession conflicts, and civil wars are all examples of crises of authority.

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a The PITF, for example, groups together civil wars, adverse regime changes (authoritarian backslide, revolution, state failure), and genocide in its handling of instability.

b In the behavioral model, a crisis of “replacement” would be a leadership’s persistence beyond its natural term, thus cancelling the stabilizing dynamic of replacement. Crises of this kind are likely to evolve slowly and are less likely than the other types to threaten US national interests.
Second, a crisis of resilience refers to a state’s ability to adapt. Here, a state cannot meet its basic responsibilities and is unable to change its pattern of relationships with society. Again, not exclusively, this is often an institutional-level dynamic, clearest in state failure, policy failures or deadlocks, and impotent responses to natural disasters, for example.

Third, a crisis of legitimacy refers to a society’s view that a regime has lost the right to rule because it is wrong or unjust. Though such a crisis affects everyone, this is often a popular-level dynamic, clearest in protests, revolutions, and insurgencies.

These scenario types overlap and are interrelated, as shown in the examples from East Asian history below. Though artificial, the separation of instability types helps to give structure to analysis.

**Probability: Trends and Triggers**

The probability of a state’s falling into instability is a function of “trends” (which measure broad patterns in authority, resilience, and legitimacy over time) and “triggers” (events likely to precipitate state instability). The lower a state’s authority, resilience, or legitimacy, the less potent a triggering event would have to be to disrupt stability. The impact of a self-immolation, for example, is less likely to spread in a state able to crack down effectively on dissent (authority), adjust its policies (resilience), or rely on the support of the majority (legitimacy). Thus, a self-immolation caused a crisis in Tunisia, where the gaps in these dynamics were wide.

To measure trends, indicators appropriate to each state are required. (An indicator related to religion, such as clerical approval, will better reflect conditions in Syria, for example, than it would in Japan.) As in the Stability Assessment Framework, periodic scoring along a defined, coded scale permits creation of graphs to ease pattern recognition and
comparative analysis. (See examples on preceding page.)

The interpretation of trend graphs is necessarily comparative, usually over time and within states, as patterns will mean different things for different states, regime types, and cultures. In a democratic or traditionally localized society, for example, a low authority trend may not suggest vulnerability. In that same state, however, a declining authority trend will signal an increased risk of instability, as it is low relative to its own historical baseline.

Occasionally, comparisons may be revealing, especially among uniquely similar states or historical cases of instability. A trend comparison between postcommunist systems in China and Vietnam, for example, may yield insight. Similarly, the analysis of historical patterns in East European states before the collapse of their communist systems may test conclusions drawn from within-state analysis.

The trend graph also hints at likely scenario types. A country with resilience- and legitimacy-centered vulnerabilities—as in the hypothetical examples in the foregoing graph—is less likely to experience a crisis of authority. These patterns of vulnerability can suggest that the probability of a crisis has increased.

There still remains the problem of identifying triggers, a difficult challenge for two reasons. First, triggers historically have been difficult to predict. There was no reason to think that the removal of fuel subsidies would cause protests in Burma in 2007, for example, or that the self-immolation of the street vendor in Tunisia would precipitate the events it did.

Second, neither the probability nor the impact of potential trigger events is constant. Instead, different combinations of declining trends enable and shape different kinds of triggers. Police corruption that constrains authority, for example, may raise the probability that a confrontation will develop into a protest and increase the size and effect of that protest once it has begun. As a result, conventional probability-and-impact assessments of specific trigger events are misleading. They assume that characteristics of triggers are constant when they are not.

Despite these challenges, triggers can be estimated. As social catalysts, they have wider meaning only insofar as they occur in contexts primed for reaction and interaction. Trigger analysis should focus on contexts instead of specific events. (This context of local conditions is similar to the opportunity dynamic of the behavioral definition of instability.)

The four clearest practical contexts in which triggers might spark instability are elite division, policy deadlock, public awareness, and social trust. Within authority, a divided elite is much more vulnerable to sudden stresses than a united one. Within resilience, policy deadlock paralyzes a state's ability to respond to change. And, within legitimacy, public awareness and social trust—information and a way to discuss it—facilitate popular mobilization.

These local conditions set the context for trigger events. If conditions would allow a trend-enabled trigger to spread, its probability of sparking instability events rises. Conversely, if they would not, an event may occur in a context of vulnerability without developing into a trigger. The below table presents a hypothetical pattern analysis of practical conditions, coded along a defined scale.

The final estimate of probability draws on both broad trends of vulnerability over time and the degree to which practical conditions are affected by the catalytic action of triggers. The estimate includes absolute and
relative assessments of the probability of each scenario type emerging. Importantly, the judgments remain those of the analyst, and they are not prescriptive but encourage the transparency, debate, wider considerations, and assumption checks of good analytic tradecraft.

**Impact: Responses and Consequences**

The impact of state instability is a function of group responses and consequences. Unlike probability, which focuses on a single point of time (the onset of instability), impact centers on an extended period of time (the duration of instability). As a result, it is a relative mess of contingent futures, multiplying over several “rounds” of interaction. Only first-round responses and consequences can be estimated; second-round estimates lose their specificity.

The first-round analysis of actors uses a two-by-two matrix to develop course-of-action types. Like scenario types, these are more useful as generic futures than as specific scenarios. Identified through brainstorming and discussion, the two most important variables affecting a group’s response can be joined to form two crossed axes, creating four conceptually distinct potential course-of-action types. The matrix below provides an example of options available to a state neighboring another in distress. The responses of multiple actors such as key leaders, social groups, or military units may be of equal importance to policymakers and can also be the subject of analysis.

These are only generic options and have little meaning outside of the context of each scenario type. Context shapes the operational details of each course of action. Within a neighbor’s response, for example, different kinds of military units might be deployed to secure the borders in a crisis of legitimacy than would be deployed in an intervention to stem the flow of refugees in a crisis of authority. The table in the upper left of the next page presents a framework combining response types with context.

This framework enables judgments of impact that are critical to policymakers, planners, and strategists. Read by column, it identifies a group’s most likely and least likely response types, setting baseline assumptions for planning. Read by row, it provides a fragment that, when combined with other groups’ courses of action, establishes baseline expectations of particular scenario types.

A similar approach can be used to estimate consequences. Here, however, the range of consequences cannot be reduced to four “types.” The impersonal effects of instability—crime, social division, deteriorating infrastructure, etc.—are too scattered, scenario-dependent, varied, and of irregular importance to shrink into just four categories.

A better organizing principle is policymaker interest—a focus not on the details of consequences but on the conditions needed to implement potential policy initiatives. For instability, this interest is represented
most reliably by doctrine. The US Army Field Manual 3.07, Stability Operations, identifies 38 stability tasks that could be used to answer two of policymakers’ most difficult questions: “Do we need to act?” and “When is it best to act?”20

In response to the first question, doctrinal stability tasks can be reframed to represent policy values and then judged according to the degree to which they are at risk. Together with more traditional interests, this provides a means to estimate stakes. Values and interests likely to be at risk imply a need to act; those likely to remain safe imply that other options may remain open. (See table on the right.)21

In response to the second question, stability tasks can be reframed to represent key conditions and then judged by the degree to which they would help or hinder a proposed policy. This leads to estimates of timing. Conditions challenging a proposal suggest a need to wait; conditions favorable to it imply an opportunity to act. (See table on next page, which shows select stability tasks in the context of conditions in a location.)21

But these tools are limited. They estimate only the first round of many in the likely interactions between groups and consequences. Rapidly multiplying contingent futures prevent a second- or third-round estimate. This is an opportunity for future methodological development.

The final estimate of impact not only presents the most dangerous and the most favorable scenario types. Along the way, it ensures transparency, debate, wider consideration, and assumptions checks in a process that remains centered on the analyst.

**Overall Estimate: So What?**

Together, these tools could be used to generate a summary estimate of state instability for policymakers that not only outlines probabilities of broadly
defined threats but also identifies the most likely, most dangerous, highest risk, and most favorable instability scenario types; the likely responses of key actors; and an evaluation of conditions that would help shape their decisions.

These judgments reach several audiences. They support policymakers with a more complete estimate of a potential instability crisis. They support planners with a planning case (most likely), hedging case (most dangerous), and testing cases (combinations of others). And, last, they support strategists by identifying challenges or conditions likely to result from instability ahead of time, allowing them to develop strategies earlier, before a crisis inspires a rush to action.

These needs are real. Almost two weeks into the protests that destabilized Egypt in early 2011, for instance, a frustrated American official vented to David Sanger of the New York Times. “This is what happens when you get caught by surprise,” he or she said. “We’ve had endless strategy sessions for the past two years on Middle East Peace, on containing Iran,” the official continued, “and how many of them factored in the possibility that Egypt... moves from stability to turmoil? None.”

To expand on the official’s words, the early response to “Arab Spring” is what happens when policymakers are caught not only by surprise, but without adequate analytic ground to stand on. In hindsight, it is hard to conclude that a structured qualitative estimate of state instability for each major country in the region would not have given American strategists what they needed to better prepare for instability in Egypt and across the Middle East.

**Reducing Uncertainty**

For all of these potential benefits, the approach outlined here remains imperfect. Even in the hands of outstanding analysts, it would probably not achieve the prediction rates reported by quantitative models like the PITF. And it cannot forecast exact operational details or second-round consequences. By necessity, state instability will remain to some degree unpredictable.

But, as Sherman Kent, the father of estimative intelligence, once wrote, “estimating is what you do when you do not know.” State instability may remain at least partially unpredictable, but it need not remain uninvestigated. The structured qualitative method advanced here takes another step toward removing some of that uncertainty; opening up the analytic process to increase transparency, debate, wider consideration, and assumptions checks; providing policymakers, planners, and strategists the intelligence support they need; and reducing not just surprise, but the policy paralysis that too often follows state instability.

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2. Ibid.


4. For a helpful introduction to some of these approaches, see Frederick Barton and Karin von Hippel, “Early Warning? A Review of Conflict Prediction Models and Systems,” PCR Project Special Briefing, Center for Strategic and International Studies, February 2008. This paper is available for download at http://csis.org/publication/early-warning.


11. O’Brien argues that effective support must include more than warning: “Forecasts of impending crises alone are insufficient; decisionmakers require informed insights into how the options at their disposal might mitigate, or even exacerbate, the crisis.” O’Brien, “Crisis Early Warning,” 88.

12. For more on the use of structural analogy models, see Goldstone, “Using Quantitative and Qualitative Models.” For an example of a Delphi forecast of instability, see the focus on unification-by-absorption in Park Young-ho and Kim Hyeong-ki, “2010 Unification Clock: When We Will See a Unified Korea?” Korea Institute for National Unification, December 2010. (This paper is available for download at http://www.kinu.or.kr/eng/pub/pub_02_01.jsp?page=1&num=85&mode=view&field=&text=&order=&dir=&bid=DATA05&ses=.)


15. Ibid., 332.

16. Ibid., 337–38.


18. Researchers in other fields rely on similarly artificial heuristic types. The most helpful typology of authoritarian regimes, for example, often classifies them as mixed, or “hybrid.” Barbara Geddes, “What Do We Know About Democratization After Twenty Years?” Annual Review of Political Science 2 (1999); Barbara Geddes, “Authoritarian Breakdown: Empirical Test of a Game Theoretic Argument,” pape presented at the Annual Meeting of the American Political Science Association, Atlanta, GA, September 1999; and Natasha Ezrow and Erica Frantz, Dictators and Dictatorships: Understanding Authoritarian Regimes and their Leaders (New York: Continuum, 2011).


20. Ibid.

21. Ibid.
