Resilience

Reprinted from Resilience: A journal of strategy and risk

Resilience: What it is and why it's needed

By Lee Howell

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Resilience: What it is and why it's needed

By Lee Howell

Risk resilience is as important for countries as it is for companies. From a systems-thinking perspective, a risk-resilient country is one that can adapt to changing contexts, withstand sudden shocks and recover to a desired equilibrium, and all while preserving the continuity of its operations. The ability to recover from a crisis and to adapt to a changing environment are both important. Preliminary research suggests that resilience is linked to leadership ability, transparency and efficiency in getting things done, and good relationships between the public and private sectors. The World Economic Forum's Risk Response Network is developing a diagnostic tool to measure a country's resilience in the face of global risks in terms of the five subsystems of redundancy, robustness, resourcefulness, response and recovery. This tool will be based on a combination of quantitative statistical data and perception-based data.

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From natural disasters to financial shocks, global risks are exogenous events, which go beyond the capacity of a country or corporation to manage on their own. Traditionally, the practice of risk management has focused almost entirely on preventable risks, where a culture of strict compliance can mitigate, or even avoid, worst-case outcomes. Filling the analytical gap on global risks, the World Economic Forum publishes annually its *Global Risks report* to assess the likelihood, impact and inter-linkage of 50 such risks. Its central prescription is that countries as well as companies need to focus much more on building their resilience.

What does it mean for a country to show resilience in the face of risks it cannot manage alone? A structural engineer would define resilience as the capacity to withstand more stress, and to return to normal after a stressful event. This is a suitable definition for a bridge or a skyscraper, but not necessarily for a country. History has very few examples, if any, of a country that withstood a major stress only to return to its previous state.

In a national context, stress often reveals a variety of critical but lesser-known systems through which a country manages to adapt by finding different ways to carry out essential functions. This realisation is behind the effort by the World Economic Forum's Risk Response Network (RRN) to develop a diagnostic tool to assess a country's resilience to possible global risks.

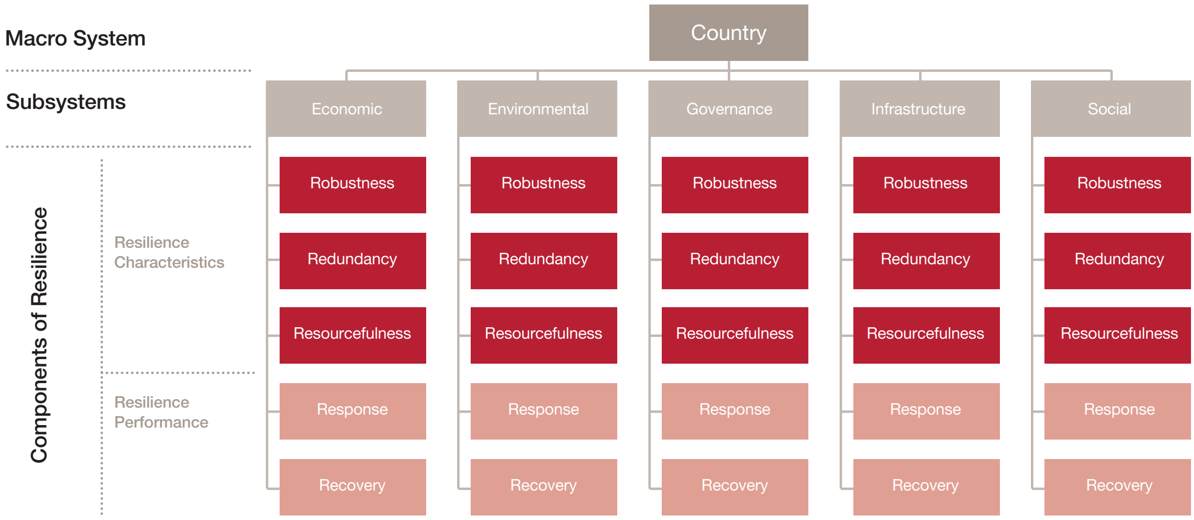
National resilience, in the context of this initiative, involves the capability to:

1) adapt to changing contexts;
2) withstand sudden shocks; and
3) recover to a desired equilibrium, while preserving the continuity of its operations.

As global risks can be either sudden or slow-burning, the three elements in this definition encompass both recoverability (the capacity for speedy recovery after a crisis) and adaptability (timely adaptation in response to a changing environment).

National resilience requires 'systems thinking' – that is, conceptualising a country as a system itself, which is both part of larger systems and comprised of smaller systems. Those larger systems include the global economy, the climate, communications networks that reach across borders, and so forth; in effect, the *Global Risks report* analyses risks that play out within these larger systems. The proposed diagnostic framework for assessing national resilience to global risks considers five subsystems that make up a country system – its economy, environment, society, governance and infrastructure – and works from a definition of resilience often used in a systems context: the ability to maintain core functions in the wake of a major disturbance.

Figure 1 What is resilience?



Source: World Economic Forum

The proposed framework of the RRN sets out to assess each of the five subsystems against five attributes of resilience drawn from the aforementioned systems thinking:

Redundancy – Having excess capacity and diverse ways to accomplish the same objectives

Robustness – Having fail-safes and firewalls and the ability for decision-making to become either more hierarchical or more modular when necessary

Resourcefulness – Having networks of trust that enable flexible self-organising to adapt to crises in novel ways

Response – Having good feedback mechanisms that enable the early recognition of emerging issues and the ability to mobilise quickly

Recovery – Having the capacity to rebound from a crisis by absorbing new information and adapting quickly to new circumstances

These five attributes of resilience will be applied to the five country subsystems mentioned above. The aim is to combine quantitative statistical data with perceptions-based data in a methodology similar to the Forum's well-established Global Competitiveness Index. In practice, this is done by collecting perception-based data through two of the major Forum surveys administered annually: the Global Risks Perception Survey with over 1,000 respondents, which feeds into the *Global Risks Report*; and the Executive Opinion Survey, with over 14,000 respondents, which is a major component of the *Global Competitiveness Report*.

Respondents to this year's Global Risks Perception Survey were asked, for each of the 50 global risks: "If this risk materialised in your country of expertise, what is the ability of the country to adapt and/or recover from the impact?" The responses from environmental and economic categories of risks provide expert perceptions of a particular country's capacity for recovery in each of these subsystems.

Ten countries received enough responses in the 2013 Survey to be statistically significant, with Switzerland scoring highly on both counts and Italy and India at the lower end of the scale. Interestingly, Japan was perceived to be highly resilient environmentally, but significantly less so economically.

Meanwhile, respondents to the Executive Opinion Survey were asked "How would you assess your national government's overall risk management effectiveness of monitoring, preparing for, responding to and mitigating against major global risks (e.g. financial crisis, natural disasters, climate change, pandemics, etc.)? (1 = Not effective in managing major global risks; 7 = Effective in managing major global risks)". This is a first step towards ranking countries on the response capacity of their governance subsystem.

Of the ten countries that attained statistical significance in the Global Risks Perception Survey, the responses to the Executive Opinion Survey showed that governments in Germany, Switzerland and the UK were perceived by business leaders to have comparatively high-risk management effectiveness, with Russia and Japan scoring comparatively poorly. In general, countries perceived as having high-risk management effectiveness tend also to score highly on overall competitiveness as ranked by responses to the other questions in the Executive Opinion Survey, which are used to compile the Global Competitiveness Index.

The RRN team performed statistical analysis of survey answers to examine how responses to the question on risk management effectiveness correlated with others. These perceptions of resilience were found to be statistically significantly correlated to seven other factors covered in the survey:

- Politicians' ability to govern
- Business-government relations
- Reform implementation efficiency
- Public trust of politicians
- Wastefulness of government spending
- Measures to combat corruption and bribery
- Government provision of services for improved business performance

It is possible to identify three broad themes from these seven items. First, resilience appears to be linked to leadership ability – politicians must be able to command the attention of their people and get things done, particularly in a moment of crisis. Second, resilience is aided by transparency and efficiency in getting such things done. And third, resilience depends on good relationships between public and private sector stakeholders, allowing corporations to keep policy-makers informed about changing conditions and how they can help business to continue.

These are only preliminary findings, however, and much further work remains to be done as the RRN refines the understanding of both resilience at a country level and its measurement. By combining assessments of each of the five factors of resilience as they apply to each of the five country subsystems, the aim is to help national decision-makers to benchmark their country's level of resilience, track progress and identify areas that may require strategic investment in the face of looming global risks.

Implications for key stakeholder groups

While lessons for stakeholder groups will become clearer as the proposed diagnostic framework is refined and developed, some initial considerations about how different groups might contribute to national resilience can be identified from research conducted so far:

Governments – Public trust and the capacity for effective and efficient action are essential in times of crisis. But they cannot be built in times of crisis – the groundwork must be done in advance.

Private sector – Businesses often have more presence locally than governments during crisis situations. Relationships of trust built through public–private platforms can work to benefit all.

NGOs – National resilience appears to be correlated with tackling corruption and wastefulness and improving transparency. These are areas where civil society organisations can play a watchdog role.

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