

# Existential risk: challenges for risk regulation

**Kira Matus** highlights why existential risks deserve to be taken seriously

There is a trend in many areas towards attention to 'big' risks. Financial regulation has become increasingly concerned with so-called systemic risks. Others, and not just Hollywood blockbusters, have been attracted to the study of civilization-destroying catastrophic risks. Indeed, the OECD has become increasingly interested in 'high level' risks and ways in which different national governments seek to prepare for and manage actual events, such as the aftermath of major earthquakes, or the response to a terrorist attack. The notion of 'existential risk' might be adding to the cacophony of emerging 'big' risk concerns. However, existential risk deserves special attention as it fundamentally adds to our understanding of particular types of risks, and it also challenges common wisdom regarding actions designed to support continued survival.

What is existential risk? We can approach this question by looking at several attributes. The first attribute is what, in fact, is at risk. One set of existential risks are those that threaten survival. These are the acute catastrophes, i.e. the idea that particular events' impacts are likely to extinguish civilization. Such risks have been identified when it comes to asteroids, nuclear war, and other large-scale events that undermine the possibility for survival in general, or, at least, in large regions. A second set is based on the idea that existential risks are not just about physical survival, but about the survival of ways of life. In other words, certain risks are seen as threatening established ways of doing things, cultures, social relationships, and understandings of the 'good life'. There is, of course, much disagreement about what the good life constitutes, and therefore there will always be disagreement as to what exactly an existential risk constitutes.

A second attribute is the degree to which an existential risk is triggered by a single catastrophic incident. Existential risks arise not merely from one-off large incidents, such as earthquakes, tsunamis, nuclear meltdowns or, indeed, asteroid hits. Rather, existential risks are about complex, inter-related processes that result in cascading effects that move across social systems. The overall impact of these system changes could result in the types of physical or cultural destruction that is the focus of the first two perspectives.

Whether triggered by catastrophic events or complex cascades, standard operating procedures are unlikely to be sufficient for dealing with existential risks; instead, this is a space in which improvisation and creativity are required. A third attribute of existential risks is the challenge they present to standard approaches to risk regulation. Existential risks are defined by their cross-systemic nature; a failure within one system (say, finance) has not just catastrophic implications for the sector in question, but threatens the survival of another system (say, the environment, as funding for particular measures dries up). In other words, the focus of existential risks is not just on the systemic level, it focuses on the cross-systemic dimension that is even more difficult to predict and assess than attempts aimed at establishing activities that are of 'systemic' relevance by regulatory systems that

tend to be narrowly focused and independent from each other.

Existential risks are characterized by a fourth feature, namely the idea that existential risks lead to responses based upon fear. Individuals are confronted with their fears about survival

and about the meaning of their lives. This aspect of existential risk is particularly troublesome in an age of low trust in authority and, consequently, a political style that is intolerant of 'blame free' spaces. In the absence of confidence in public authority, few options remain. For some, the solution will rely on framework plans, pop intellectuals and other fashionable ideas that seem to offer redemption from the fear of extinction. Others will prefer to 'go it alone' and seek to develop their own plans for survival, noting that risk taking is, after all, an individual choice. Others, again, will deny the legitimacy of public authority and veer towards those choices that have been legitimized by their own communities. Finally, some will deny that existential risks exist in the first place. In other words, individual responses to existential risks vary considerably and pose challenges for any risk

management and communication strategy.

Existential risks therefore pose considerable difficulties for instruments of risk management and regulation. For one, regardless of probability, the severe impact of a particular risk makes resource and attention allocation decisions problematic. Interdependencies, threshold effects, and non-linearities make calculations regarding existential risks highly speculative. Furthermore, existential risks also lead to demands for deterministic statements ('is it absolutely safe'), a view that neither suits the risk-language of probabilities, nor is likely to attract much popular acceptance. Finally, while it might be possible to list a few existential risks at any point in time, attention is highly partial and changing. Today's high profile existential risks (and, therefore, tomorrow's cinematic blockbuster) might quickly move to the background as the news agenda shifts; yesterday's attention to environmental issues might quickly turn to public health or terrorism related topics.

What, then, can be done about existential risks? The list of sources of failures when it comes to existential risks is long, ranging from the 'failure of imagination' (of the 9/11 Commission report) to the 'failure of initiative' (in the case of the tragic events of 22 July 2011 in Norway). There are also some 'good news' stories, such as the self-organizing voluntary co-operation among communities in the immediate context of disasters as witnessed in Norway and the post-earthquake efforts in New Zealand's Christchurch. One of the most common recipes is to call for 'resilience'. Apart from an emphasis on capabilities for 'bouncing back' rather than seeking to prevent risks from occurring, there is little agreement as to what resilience actually is, or how it can be achieved. It is therefore, for example, questionable as to whether

resilience can actually be designed. There are frameworks in high risk industries (such as oil platforms) that seek to measure resilience at the plant level, but whether such indicators can be developed for complex communities that are faced not with single events, but cascading effects, is more questionable. Furthermore, it is also questionable how far resilience can be taken since there is little scope for bouncing back after a major asteroid hit. In some (or many) cases, change and adaptation may therefore be unavoidable.

Resilience implies that individuals have a responsibility for managing risks. This, again, raises considerable problems for resilience. First responders and other types of crisis managers might be willing to undertake continuous crisis and emergency training, and read commission and inquiry reports to draw lessons. However, it is highly unlikely that high level politicians and, let alone, populations at large will consider insights from weighty and learned inquiries. How to communicate resilience strategies to communities (and to politicians) is a key challenge. Finally, resilience requires a capacity to adapt that assumes a certain level of trust, in individuals and their co-operation, as well as in the backup resourcing by public authority. Whether such pre-requisites can be assumed or even engineered is, again, doubtful, especially in an age of cut-backs in public expenditures.

Existential risks therefore deserve specific attention when it comes to the study and practise of risk and crisis management. It points to the traditional themes that have featured in crisis management and the wider public management literature, especially in terms of inter- and intra-organizational learning and co-ordination. Furthermore, it points to particular existential properties that need to be taken into consideration when managing risks. These properties point not just to individual fears and distrust in public authority, they also point to the inter-related, cross-system nature of particular risks that pose a key threat for contemporary societies. How regulation and policy can be structured to be attentive to these complexities and interdependencies is an area that requires a great deal more academic and practical attention.

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