



ARTICLE

Global existential risks

Global existential risks are a class of human-made and natural phenomena that could destroy all human life or permanently limit humanity's development. Those who worry about them have generated a lot of media attention with calls for research and immediate action. Others consider such risks too distant or improbable to deserve much attention.

Certain existential risks, such as climate change and nuclear war, seem to be intensifying or becoming more probable, while others seem as remote as ever. There is also growing skepticism about the existential risks discourse. Recent controversies surrounding some of the field's major figures and donors may reduce its influence, but it will likely remain key to the debate about risk discourse.

Ultimately, this debate reduces to a single question for policy makers. How should governments use their limited attention and money when faced by a range of threats with different likelihoods and on timelines varying from right now to the distant future?

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Global Existential Risks

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Global existential risks, also called X-risks, are a class of human-made and natural phenomena that could destroy all human life. Some also include things that could harm human civilization beyond repair in the same category.¹

There is no standard list of global existential risks. However, the following have gained the most attention: near Earth objects (e.g. asteroids and comets), supervolcanoes, unstoppable pandemics, cosmic events (e.g. gamma ray bursts), large-scale nuclear war, uncontrolled or misaligned artificial intelligence, and lone-wolf bioterrorists.² More recently, runaway climate change³ and [global polycrisis](#) have been added to some lists of existential risks.

The idea of global existential risks became prominent over the last decade. Some people who worry about them have generated a lot of attention in both traditional and social media. Others are much less concerned about some or all of these risks. This disagreement arises from uncertainties about how likely they are to happen, how soon they might happen, and whether humans can do anything about them.

Longtermism provides the philosophical foundation for many of those sounding the alarm about existential risks. Longtermism values future humans as much as current humans, because the future may include many more people than the present. It also embraces the idea of doing the most good for the most people. As a result, from a longtermist perspective, existential threats in the distant future require action in the present.

For some, this holds true even if it means drawing attention from current concerns such as biodiversity and migration. [Those most concerned about](#) existential risks call for more funding for research, the development of technologies to combat key risks, better systems of international cooperation, stronger domestic institutions, and improved public awareness of existential risks.⁴

Some [critics](#) of this view argue that, aside from large-scale nuclear war, the most familiar existential risks are improbable or too far off. As a result, it would be irrational to devote significant resources to them. Instead, they urge policy makers to focus on pressing, present-day challenges, such as climate change and inequality.⁵

Others warn that neglecting today's challenges could make it much harder to deal with longer-term threats. After all, today's big challenges already endanger the institutions and systems needed to meet existential risks in the future.

This connection between present and future highlights the danger of all-or-nothing thinking when it comes to threats. It is not necessary to focus all available attention on one class of risk. But [this does not mean that all threats deserve equal attention](#), regardless of their probability or immediacy.

The discussion surrounding global existential risks is changing in two ways.

First, certain existential risks seem to be intensifying or becoming more probable. A large-scale nuclear war resulting from accidental escalation seems more likely after Russia's invasion of Ukraine than at any point since the fall of the Soviet Union. The pace and impact of climate change have outpaced most predictions as well. Since this is not yet considered "runaway," not everyone sees it as an existential risk. But climate significantly affects already-stressed systems such as food, trade, and migration. As a result, this acceleration does increase the chance of a global polycrisis—i.e. a multi-system crisis that emerges as stresses in individual systems reach tipping points and synchronize into a massive disruption greater than the sum of its parts.⁶

Second, [skepticism](#) is growing about existential risks, its philosophical foundations, and the motives of some of its most prominent supporters.⁷ At first glance, this can be difficult to see. As a concept, existential risk continues to benefit from the prominence of its founders, whose books, speaking engagements, and social media presence have made them global figures.⁸ Endorsements from [tech billionaires and the support of the Effective Altruism movement](#) provide further momentum. So does the prominence of entities such as Oxford's Future of Humanity Institute and Cambridge's Centre for the Study of Existential Risk. All of this ensures that existential risks will be part of the agenda in international fora such as the UN's 2024 [Summit on the Future](#).

However, recent controversies surrounding some of the field's [major figures](#) and [donors](#) appear to have reduced its appeal and may limit its funding in the future.

As a category of threats, global existential risks rose to prominence thanks to a handful of influential thinkers and organizations. They have made a strong case that such threats are real and worthy of action—strong enough to get the attention of policy makers, public figures, and major international bodies. However, critics and controversies have raised strong doubts about some arguments for the

importance of existential risks. Meanwhile, the global polycrisis has emerged as a more compelling concept to some.

The uncertainty surrounding global existential risks inspires many questions. Is it reasonable to ignore this whole category of threats? Is it reasonable to make each one an urgent priority? Or does it make more sense to identify a subset of such risks as worthy of taking seriously? And whatever path policy makers choose, how could Canada maximize opportunities while minimizing challenges related to serious threats of all kinds?

Ultimately, all the debate surrounding existential risks reduces to a single question for policy-makers. **How should governments use their limited attention and money when faced by a range of threats with different likelihoods and on timelines varying from right now to the distant future?**

Endnotes

¹ Nick Bostrom, *Superintelligence: Paths, Dangers, Strategies*, (Oxford: OUP, 2014). T. Ord, *The Precipice: Existential Risk and the Future of Humanity*, (London: Bloomsbury Publishing, 2020). The line between these types of threats is clearer in theory than in practice. For example, a global polycrisis fits the definition of a catastrophic risk but might also rise to the level of existential risk in a worst-case scenario.

² Some lists include extraterrestrial encounters gone wrong, physics experiments that create black holes, self-replicating nanotechnologies, reversal of the Earth's magnetic poles, and hydrogen sulfide poisoning following the collapse of ocean currents. However, these risks have either become less troubling over time or have yet to gain widespread attention.

³ This refers to a situation where temperatures begin to rise much faster than expected. As a result, nightmare scenarios thought to be centuries in the future could emerge in a few decades, leaving insufficient time to adapt.

⁴ T. Ord, "The Precipice: Existential Risk and the Future of Humanity" filmed at EA Global: London 2019, Video, 27:34. <https://www.youtube.com/watch?v=eMMAJRH94xY>.

⁵ S. Pinker, *Enlightenment Now: The Case for Reason, Science, Humanism, and Progress*, (New York: Penguin, 2019), see especially chapter 19.

⁶ See M. Lawrence, S. Janzwood, and T. Homer-Dixon, "What is a Global Polycrisis?", accessed Apr. 5, 2023. <https://cascadeinstitute.org/wp-content/uploads/2022/04/What-is-a-global-polycrisis-v2.pdf>.

⁷ Tyler Austin Harper, "Unequal Survival: Climate Fiction, Paranoid Anthropocentrism, and the Politics of Existential Risk," In *Climate Fictions*, ed. A. Sperling Special Edition of *Paradoxa* 31 (2019-2020): 425-444.

⁸ Especially Nick Bostrom, <https://www.youtube.com/watch?v=P0Nf3TcMiHo> and Toby Ord.