## DAGENS NYHERE.

ENGLISH VERSION

## Reply

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It is easy to agree with Linnér and Pielke in their opinion piece in Dagens Nyheter (9/27) when they write that there are plenty of historical experiences of unwarranted scaremongering and doom scenarios. However, this should not lead us to think that no climate-related disasters can occur. To the contrary, according to the opinion of many leading scientists, there is a far from negligible risk of catastrophic outcomes as a result of global warming. How we should handle this information is obviously something that needs to be discussed, writes economist Olof Johansson-Stenman.

o communicate effects of uncertain outcomes is unfortunately difficult. Let's assume that you make a trip to a tropical country, which with certainty will result in a week with a fever of 38 (instead of 37) degrees when you get home. Suppose also that you can take a pill implying that you instead with 90 percent probability will remain healthy, but with 10 percent probability will get a week with a fever of 45 degrees. Should you take the pill? The most naive way of reasoning is to say yes because the most likely outcome then is that you will remain completely healthy. It is almost as naive to justify a yes answer because the so-called statistical expected value of the fever is then lower ("on average" the fever will then be 0.8 degrees instead of 1 degree). At the same time, 10 percent probability of dying is of course a lot worse than a week of moderate fever.

This example illustrates that we may need to think carefully also about unlikely outcomes. Concerning climate change, we can not just look at likely temperature increase patterns and hence ignore disaster scenarios. The best we can do is to listen to the established science in the field, and even though we might be afraid of what it has to say this is a very bad reason to stop listening.

For those who still believe that the climate is fairly stable, it is important to remember that climate

has varied very dramatically in the last 100,000 years, and for us the favorable climate that we now experience is the exception rather than the rule. Contrary to what so-called climate skeptics often argue, major uncertainty is in itself a reason to act forcefully today.

Correspondingly, it is important to be able have a debate about the effects of different institutions. This includes the risk of short-sightedness when it comes to both individuals' and decision makers' influence on future generations. That democratic governments tend to work for their own country's interest even when this is globally fatal is also a well-known problem that has been discussed for a long time. For example, Albert Einstein and Bertrand Russell argued for a world government. Few believe today in such a government, which would of course imply many problems, but the lack of an effective global decision-making body in the case of climate change is nevertheless an obvious fact that we need to discuss and deal with.

Finally, an important characteristic of a wellfunctioning democracy and an open society is that one can (and should) discuss shortcomings also of the democratic system and its institutions.

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