The first challenge prize is for spotting key opportunities or possibilities created by the COVID-19 crisis (300 words)

Title: COVID-19 Provides a Key Opportunity to Talk About Extinction Risks

Pandemics were a high-profile concern for decades, but we were unprepared. There are many worse crises that we are still unprepared for. The COVID-19 pandemic presents a key opportunity for the UK to prepare for these risks.

Prime Ministers, scientists and journalists warned about the risk of pandemics, but when Coronavirus came, the UK was poorly prepared. Our well-respected pandemic plan was built for a different style of disease. While Italy suffered, we denounced airport quarantines as too difficult and didn't start lockdown. Our vaccine delivery has been world-beating, but MPs mocked Matt Hancock's vaccine optimism as recently as October 2020.

There are many other crises that are in a similar box to pandemics. Oxford academic Toby Ord puts human extinction at about 1 in 6 in the next 100 years. This is a lethal dice roll, a cocktail of risks around climate change, nuclear war, biowarfare and Artificial Intelligence. This may be all the warning we get.

We now have a unique opportunity to fix the mistakes we made around COVID-19: Our pandemic planning made us overconfident. Instead, Decision-makers should feel emotionally engaged and have a robust understanding of what we know and what we don't. Our initial response was underfunded and slow, with dire consequences. For catastrophic risks, the time to spend is now. An ounce of prevention is worth a pound of cure. Finally, in the early days of COVID-19, we immediately discounted some of the best solutions. What ideas are currently "too hard", "too expensive" or "too silly"?

In conclusion, the UK has a unique opportunity to change its stance on existential risk. Let's admit that we have a problem and do something about it. Some countries have avoided COVID-19, the UK can lead the world in avoiding something far worse.

The second challenge prize seeks to find innovative answers to the challenges or opportunities presented (1000 words)

Title: Prediction Markets Could Help Stop the Next Pandemic

Prediction markets would bring information to light on possible crises. It's not culturally acceptable to predict suffering, but not having this information costs lives. The Government can create useful but controversial markets. Predictions from these markets will "break the ice" on important issues, bringing forward discussion and any necessary government action, saving lives.

A lack of information has led to poor decisions around Coronavirus. Consider the following

cases: Handwashing was prioritised over mask-wearing, quarantining incoming travellers was deemed impossible and a too-short initial lockdown led to months of additional confinement. Had we known this at the time, live in the UK could have carried on as normal, as it largely did in New Zealand and Taiwan.

Some people did know this information, but there weren't good channels to the public or politicians. On 24th January 2020, a top forecaster with the username "traviswfisher" reduced their forecast for the 2020 global population, citing the "wuhan coronavirus" as the reason. This level of concern took 6 weeks to be expressed by the UK Government. How does information like this move from unknown experts to the public?

Prediction markets funnel information from many sources into a single stream. The stock market is a good example. If people think a stock will go up in value, they can buy it. If they think the opposite, they sell. In this way, it transforms the actions of many actors into one clear signal, the stock price. Had a prediction market existed, people like "traviswfisher" could have contributed their ideas into a signal which would have pointed more quickly to the danger around COVID-19.

What's more, prediction markets provide an incentive to report unpopular information. Currently, people mock bad predictions and largely ignore good ones. Markets create a reliable incentive. You can report your information anonymously and earn money. There is a simple challenge to anyone who claims the market is wrong - "bet on it".

The central point is that prediction markets let us learn controversial information more quickly. Imagine there had been a market on "deaths due to new diseases in the UK in 2020", which in January jumped to 100,000. Many would decry this as awful, that people would gain money from predicting death. But equally, this information could have saved many lives if it had been taken seriously earlier.

Private companies can't deal with this reputational blowback. Two of the largest prediction markets in the UK are run by bookies, Smarkets and Betfair. They will predict "safe" topics like elections and national reopening, but they don't want to risk the bad publicity of predicting diseases, poverty or unemployment.

The Government can lead the way by setting up Channel-4-style, publicly-owned prediction market, which predicts a broad range of useful topics. The Government regularly discusses death and taxes, so faces much less reputational risk from doing so. This would provide cover for for-profit companies to do the same.

A flourishing UK prediction market ecosystem would result in better lives for people, better policy outcomes and better journalism. If there had been a market on "deaths from new diseases in 2020", a jump to 100,000 would have shocked the public. People would have bet against it, but those with the information would have kept the price up. In the meantime, articles could have been written about this. Headlines about Italy would stand side by side with those showing markets predicting exactly the same for the UK. Every day this brought the response forward would have been worth billions of pounds and 100s of lives.

On the other hand, Governments are concerned with reputational risk too. In 2003, the US Department of Defense suggested their prediction market might include a market around terrorism. As a result of the backlash, the entire program was cancelled. There would need to be clear guidelines - avoiding markets around deaths of individuals or those which would likely incentivise crime. There is however a clear precedent for this, insider trading is illegal but profitable, yet the stock market still exists.

Prediction markets are unusual, but COVID-19 has provided a window of opportunity for unusual but good solutions. The public understands that new problems require new systems. Where prediction markets might normally be too strange they can be part of a range of changes around ensuring crises like this don't happen again.

Additionally, the Government would in turn receive cover for policy moves legitimised by prediction markets. Many times in the last year the UK government has waited weeks after an initial suggestion to act, finally pushed by public opinion. This has avoided unpopular policies, though has led to more deaths than would have happened with swifter action. Had prediction markets created urgency sooner, the government could have acted more quickly and saved lives.

It's hard to predict what's going to happen, but it's worse when you get no benefit from doing so. In the last year, there has been some reputational gain for those who made good predictions, but it's too little, too late. Prediction markets are a timely solution to this problem, though they are too controversial for private companies to undertake alone. A best-in-class public option would spur the private sector onwards and support the Government in providing good policy.