

Environmental Insights

Guest: Scott Barrett

Record Date: March 26, 2020

Posting Date: March 27, 2020

Scott Barrett: I think this is going to have profound changes that will last at least a generation. It's hard to know exactly what those changes will be, but there are going to be changes in terms of how we understand our relationship to each other, to technology, to science, to government, to international institutions. I think all of this is in play right now.

Robert Stavins: Welcome to [Environmental Insights](#), a podcast from the [Harvard Environmental Economics Program](#). I'm your host, [Rob Stavins](#), a professor here at the Harvard Kennedy School and Director of the program. In the midst of the coronavirus pandemic, we are coming to you today remotely. I'm in my home in the Boston area, and my guest is at home on Cape Cod. At this time of tremendous concern about this global epidemic, I recently asked myself if there was an environmental economist, which is what this podcast is about, who could join me on this podcast to speak intelligently from research and experience about the situation we now face.

And the immediate and obvious answer to that question is our guest today, [Scott Barrett](#). The Lenfest-Earth Institute Professor of Natural Resource Economics at [Columbia University](#), where he also serves as Vice Dean of the [School of International and Public Affairs](#). In addition to being one of the world's leading authorities analyzing alternative approaches to the threat of climate change, through international treaties, which many of our listeners may know for him, he has also written for more than a decade on an economic perspective on global infectious disease policy.

In addition to his scholarly work, Scott has served as an advisor to many international organizations, including the European Commission, the OECD, the World Bank, and the United Nations. And although he might actually wish to forget about it, he was also a lead author of the Second Assessment Report of the Intergovernmental Panel on Climate Change. And finally, I'm very pleased to say that Scott Barrett has been a frequent participant in our programs and projects here at Harvard, and also has been my personal co-author on a number of occasions. Welcome, Scott.

Scott Barrett: Thanks so much, Rob.

Robert Stavins: So before we talk about your current thinking about the pandemic, which we really do want to do, and perhaps if time permits about climate change, let's go back to how you came to be where you are and where you've been. And when I say go back, I do mean go way back. Where did you grow up?

Scott Barrett: I grew up very close to you in Wellesley, Massachusetts.

Robert Stavins: In Wellesley, Massachusetts. Was that where you were at primary school?

Scott Barrett: Yes.

Robert Stavins: And high school as well?

Scott Barrett: Yes.

Robert Stavins: And then tell us about college. Where did you go?

Scott Barrett: Well, I mean, I applied to one place. It was UMass Amherst. It was the only place probably that would have taken me. But also, the only place I could possibly have afforded. And I lucked out and got a great education there.

Robert Stavins: And there you studied resource economics. Is that right?

Scott Barrett: Yes. So in the 1970s, they had a program in Environmental and Natural Resource Economics. So I again, I really lucked out, I fell for the subject instantly. And there were great faculty there who inspired me and gave me a lot of support. So I'm always grateful for that early experience.

Robert Stavins: Now, from there, you wound up at the University of British Columbia. How did that come about?

Scott Barrett: Well, in the late 1970s, UBC as it's known, had I think, the best program in environmental natural resource economics anywhere. Maybe by the time I arrived in '82, it was not quite the best, it may have slipped just a tiny bit, but I had never even been to the West Coast, Rob at that point. And so I was looking for higher education, but I was also looking for adventure. And I really loved UBC.

It was a wonderful experience. And again, I learned so much. I mean, the work I do even to this day was influenced by both the institutions that I just mentioned, both UMass and UBC.

Robert Stavins: And you did a master's degree at UBC, is that right?

Scott Barrett: That's right.

Robert Stavins: And I recall a book that I learned a tremendous amount from that I still really value is titled "Mathematical Bioeconomics," and I believe it was by a professor at UBC, is that right?

Scott Barrett: Yeah, that's by Colin Clark.

Robert Stavins: Colin Clark.

Yeah. A real giant in this area, he was actually on leave when I was there. But one of the people that had a big influence on me there was someone named Anthony Scott, or Tony Scott.

Robert Stavins: Of course.

Scott Barrett: Yeah. And really kind of a major figure at that time in a lot of ways, but what was special about Tony was that he had a real feel for appreciation of institutions. And this at a time when most people in economics were focused much more on mathematics. And again, that had a big influence on me. Yeah, it was a great experience.

Robert Stavins: It's interesting because Harvard has something called the candidate chair, which is opened every year across the university, any department, any school, for someone to come from a Canadian academic institution. And I believe when I was either first on the faculty, or perhaps when I was still in graduate school at Harvard, he came for a year and sat in that chair for a year and I got a chance to meet with him several times.

Scott Barrett: Yeah, actually I was invited to a meeting at Harvard. I think you were not there. That's unusual that you and I weren't at the same meeting at Harvard. But he was and I was one of the speakers, and I was really pleased to be able to stand in front of an audience and tell everyone the influence that Tony Scott had on my work later.

Robert Stavins: Yeah, that's wonderful. I can imagine it. Now, from there you wound up at the London School of Economics. Was that direct and how did you happen to go to LSE?

Scott Barrett: Well, nothing I ever did my life was direct. I worked for a couple years after doing my masters, and then I went to LSE and I went there partly, Rob, because I'd never been to Europe. Again, I didn't have the opportunity to travel when I was young, which is kind of funny when you look at my life now. But I didn't have that opportunity and even more importantly, I looked at all the academics in the world, in this area who excited me, and there was one who just really stood out and that was Partha Dasgupta.

So I really went to London because I wanted to work with him. I wanted to learn how to do what he did. I think in the end, I don't do exactly what he did, but the influence there has been lasting, and probably the deepest influence of my life.

Robert Stavins: And you remain close with him over the years, right?

Scott Barrett: Yes, we're still very close. In fact, we just wrote a paper that is coming out, if it hasn't. I think it may have already come out in the PNAS, with other authors or authors as well. But yes, he's a close friend, a great mentor, and quite an exceptional, brilliant mind, that's for sure.

Robert Stavins: He also spent time at Harvard. He was actually, as I'm sure you know, he was on the faculty in economics department, and then chose to leave and to go back I believe to Cambridge.

Scott Barrett: Right. I think Cambridge has been as love.

Robert Stavins: Yeah.

Scott Barrett: His wife is from Cambridge. And they made that decision to settle there. And they're still there and still very happy there.

Robert Stavins: So what was your first job out of graduate school? Was that directly to London Business School, or is there something else in between, that I don't know about?

Scott Barrett: Yeah. Again, I lucked out. I didn't do the job market routine that people have to do today. I applied for one job, and I got it, it was that simple.

Robert Stavins: Wow.

Scott Barrett: Yeah. And actually, I got the job before I had submitted my thesis, and I told London Business School that I would have it submitted within nine months or whatever the period was, and I did. But they hired me despite my interests, despite my research, and I loved being there. And actually, there were, a bit surprising, but there were aspects of that job and that environment, because it wasn't a natural place for someone like me. But it turned out that that environment created all sorts of opportunities for me for how I look at things. So I found that this is true in every turn of my life.

You're teaching business strategy, which is about a very horizontal world. It's actually kind of similar to how countries interact. So in a funny way, I've seemed to make these circumstances and opportunities make sense, and show up in my work.

Robert Stavins: Yeah, I know, I think sometimes one looks back at one's career and the time path one's been through, it can seem as if it was linear, but actually, there's a tremendous amount of serendipity that's involved along the way.

Scott Barrett: Yeah, it's funny that young people, you probably have a similar conversation with them, but they'll look at someone like me and they'll say, "Wow, how did you do it?" It looks like I was driven. I knew what I was doing every step of the way. And of course, it wasn't like that at all.

But one of the things I really enjoy about surviving to this age is that I can look back on my life, and even though it didn't make sense, at many points along the way, as I look back at the whole arc of the life, it does feel to me like it makes sense.

Robert Stavins: Now, your next stop after London Business School, was in Baltimore at Johns Hopkins University. Is that right? You were on the faculty there for a while?

Scott Barrett: No, I was at the School of Advanced International Studies of Johns Hopkins in Washington, DC, though. I was right on Massachusetts Avenue. Yeah.

Robert Stavins: Right. And the fact that you were at Johns Hopkins, was that partly because of something we're going to get to pretty soon namely, your interest in work in global infectious diseases, or did it start up because of being at Johns Hopkins or is it simply coincidence?

Scott Barrett: It's a great question, Rob. Actually, I had done nothing on infectious diseases when I showed up at Johns Hopkins. But I had already become fascinated with the topic, not only because it's intrinsically fascinating, but also because, I've been trying to grapple like you with climate change for a very, very long time. And one way to do it is you just keep getting absorbed deeper and deeper and deeper into this enormously complex, fascinating issue.

And another way to do it, though, is you step outside. And you look at other situations that were similar in some respects. Of course, they're not going to be identical, but similar in some respect, and I became really fascinated by international cooperation as a general phenomenon.

And when you look at that topic the case from history that really stands out, was the eradication of smallpox. And it happened that the person who ran the whole smallpox eradication effort was at Johns Hopkins at the School of Public Health. He was-

Robert Stavins: Oh, is that right?

Scott Barrett: Yeah, he used to be the dean. And he was the one who led the effort for the World Health Organization. And I just wanted to say, D.A Henderson. When I first was introduced to him, he's a real giant, and he was just very welcoming. And he and I interacted a lot. He taught me an enormous amount; we actually co-authored a paper together. He has passed away now, but he was a real giant. He's one of the people who again had a huge influence on me.

Robert Stavins: And now you went from Johns Hopkins to Columbia, where you now are, is that right?

Scott Barrett: Yes, I've been at Columbia for over 10 years now.

Robert Stavins: And apparently, you're going to stay there or are we going to find out if I talk to you a few years from now you've moved on?

Scott Barrett: Well, the future is always uncertain, but I'm quite happy there, and I'm so busy. I mean, I can barely lift my head up.

Robert Stavins: Yeah.

Scott Barrett: So busy right now, particularly in this current stint as Vice Dean.

Robert Stavins: I can imagine what that must be like. So tell us, let's move into the transition from the history there to the substance. How was it that you became interested in thinking about and modeling major issues that require global cooperation for their resolution? Is there something in particular that brought you to that?

Scott Barrett: Yeah, I think it's interesting, you've been asking about my biography. When I was quite young, one of the books that had an impression on me was a book by Aldo Leopold, not the one that's famous, the one about Sand County Almanac, but another one on wildlife management. And what he says in this book is that basically every part of nature that you see, it's there because we let it be there.

So in other words, I grew up in an era when people would talk about the wilderness, maybe it's kind of uniquely American kind of concept at that time. But all of a sudden, I read this book, and I just thought about it differently, it wasn't really clear that we actually had wilderness or if we did, it was only because we allowed it to be there. Or it didn't pay us to exploit it.

So I started off from that dimension. And then really quickly, the scale of the human enterprise, the accumulation of misdeeds, persistent chemicals, and all the cumulative changes we brought to the environment just made it clear that the borders of countries were really, if anything, an impediment to addressing major challenges. So that's what brought me to focus on these transnational and especially global issues.

Robert Stavins: And then how was it that you made, I wouldn't call it the transition, but you broadened your scope, from a focus on environmental and natural resource issues, to include global health issues.

Scott Barrett: Yeah, that's kind of funny because people think tend to think... Well, first off, a lot of the environmental issues that we study are health issues, right? So when people talk about air pollution, for example, I mean, really 99% of the reason we're looking at air pollution is its effect on human health. And no one in environmental economics bats an eye about that, that's just accepted.

But for some reason, infectious diseases are seen to be in some other territory, and not part of ours. And I've never understood that. Another analogy, we in environmental economics, we studied exploitation of a fishery. So this is us going into a biological population and harvesting for our own benefit.

And you can think of pathogens as being kind of the flip side of that, which is that they're the predators, we're the prey, and they're dipping into us. And what we want to do is take measures that will reduce the harm that's caused by that.

So to me, it's just a natural that they'd be looked at together, and I've never understood why we haven't embraced the topic in that way.

Robert Stavins: That's interesting. I mean, it's also the case that there's siloing of environmental studies and environmental issues from population studies and population issues. Which a lot of people would say that's a major part, obviously of environmental problems or population pressures.

Scott Barrett: You know, it's funny. Yeah, I mean, that probably wasn't as true a long time ago, Partha Dasgupta's written a lot in population. This new paper I mentioned is to a large extent touching on population. I think in general, I think environmental economists have not really grasped the scale issues. Of course, there are always exceptions and I don't mean to make a ridiculous generalization, but I do think the scale issues are really quite important.

And when you look at climate for example, of course, we're always focused on decarbonisation, which is really kind of a technical and investment issue. But when you think about what's driving emissions, it's not just that, it's also population. It's income per head. And, of course ultimately, we need to decarbonize for sure.

Robert Stavins: And Partha Dasgupta is really, more than anyone else, is someone who exemplifies looking very, very broadly across all of those areas.

Scott Barrett: Yes, that's right.

Robert Stavins: He really has.

Scott Barrett: Yeah, I agree.

Robert Stavins: So as an environmental economist who has thought long and hard now about global health challenges, I am very interested to hear your reaction to what you see happening now in the world with the coronavirus pandemic. Just start us out wherever you like.

Scott Barrett: Okay, well, I mean this is a very difficult time for all of us, as individuals as families. You and I are parts of universities. Our whole lives have been thrown up in disarray, and a lot of people are suffering. So there's that side to it, which is, of course, very concerning. There's another side to it though, which I find is ultimately just incredibly fascinating.

And with infectious diseases, you read history, which is very important. And you see episodes from history. And one key thing to say I think about the situation we're in right now is that, in some respects, it's completely new. And certainly, it is for our generation. But in other respects, it's just been a long part of human history, because there's always been the emergence of what we would call a

novel infectious disease. And it's really shaped humanity over a very, very long period of time.

I'll just mention briefly two major episodes from history, one being the plague, which wiped out about a third of the population in Europe in the 14th century, and the other being the 1918-1919 influenza pandemic. Those had really profound changes on the world.

Robert Stavins: And what were the nature of the influenza pandemic? What are the kinds of ongoing influences you're talking about, as opposed to what happened during the period of time? What were the lasting effects?

Scott Barrett: Well, let me go back, if I can start with the plague.

Robert Stavins: Oh, sure.

Scott Barrett: Yeah. So the plague, again, decimated the population in Europe. And people have argued that... There's very strong evidence for much of what I'm going to say now. They've argued that that reduction in population of course, it made labor scarce. As it made labor scarce not only increased wages, but also shifted power in the direction away from land owners toward the laborers.

And there's evidence that it actually resulting in the end of serfdom as an institution, and even to go further than that historians have argued that it did quite extraordinary things as to, for example, usher in the enlightenment, and create space for the development of universities and for the appreciation of science. So really fundamental changes in society.

And as we look to the current situation now, of course, we're concerned with what's happening today and all of that, and it's our allies. And I think that's all right. But there's another side to this, I think this is going to have profound changes that will last at least a generation, it's hard to know exactly what those changes will be. But there are going to be changes in terms of how we understand our relationship to each other, to technology, to science, to government, to international institutions. I think all of this is in play right now.

Robert Stavins: And indeed, some of what you described as changes in the past, they were positive changes that resulted from terrible periods.

Scott Barrett: Yeah, there were. Of course, many people died, so those are all negative.

Robert Stavins: No, I'm talking about in terms of long-term effects, you said the rise of universities, for example, of higher education.

Scott Barrett: Yeah, yeah, no. And, of course, there's not a single cause for something like that, it's going to be a multiple thing. But there will be changes. I don't think, Rob, that we can expect that all those changes are necessarily going to be good.

I think it could go in different directions. And that's why I think there's so much to play for here. Because in a way, we have an opportunity.

And we need to be alert to that, because the moves we make now are really going to change how people look at those different things I mentioned before, like government and so on.

Robert Stavins: I mean, looking at shorter time horizons, I'm convinced that the post-pandemic economic equilibrium is going to be quite different in some specific ways from the pre-pandemic economic equilibrium. One of the obvious ones is that corporations around the world are going to realize that they can save a huge amount of money without a massive loss in benefits by avoiding international travel, and using Zoom and the other platforms for meetings.

I mean, you like me probably have been in countless Zoom meetings, with colleagues or teaching in the last couple of weeks, and have come to recognize that. And in private industry, where it means a change in cost structure, I assume that's going to be part of the new equilibrium.

Scott Barrett: Sure, yeah. I think that's right. We're basically being forced to do things differently.

Robert Stavins: Right.

Scott Barrett: And we're going to discover that some of your old prejudices you may have to reconsider. I've never been a particular fan of online teaching.

Robert Stavins: And myself.

Scott Barrett: Yeah. And I think I'm still not a big fan of it, but I also can see the advantages. And I can imagine, that in the future, having done this, I'll find ways to do it again. Even if it's not the only way of working. But of course, you're going to have other things, real devastation to the economy.

The equity issues, I think, are going to stand out very starkly. I think, confidence in government, and the role of the private sector, and whether all parties are chipping in. All these different things, I think are going to be very important, how they shape how we look at the future.

Robert Stavins: So you mentioned government. So I want to turn to public policy, focusing on this country and the United States. What's your candid assessment of the policy that's been coming out of Washington?

Scott Barrett: Well, there's a-

Robert Stavins: For the coronavirus.

Scott Barrett: Yeah, I mean, well, you've got I'd say a patchwork. I mean, you don't have the feeling that there's a command coming from the federal government. The states are in many cases really playing the lead. You're seeing, for example, now in New York. So it's interesting that right now the status is, and this is true within the United States, it's also true globally, despite the authority, which I think now the World Health Organization has reclaimed on this issue.

But the approach that the world's taken has been very fragmented. And that's also been true in the United States. One thing that really stands out is just the failure of the United States to be prepared. I did want to say since you and I think, probably a number of your listeners are interested in climate change that with climate change, you get these long lags, between the time you need to act and you actually get a result.

And of course, if you act to avoid climate change, what you'll find is, hopefully, you will avoid climate change, but then you're never quite sure was that because you acted or wouldn't have happened anyway? Well, here, of course, everything is moving very quickly. And you're seeing in the data that you can practice social distancing, but it takes a while for that to start to show in the statistics.

The thing I wanted to say about this, is that because of the history I discussed before, scientists have been saying for a very long time, that there's not a question of if we would get a pandemic. I don't mean exactly like this, but maybe in general character like this, was just a matter of when, it wasn't a matter of if.

Scott Barrett: So, I think this issue of preparedness is serious, and it's clear that our inability to do testing has really compromised the health and well-being of Americans.

Robert Stavins: I don't know if you saw them in the *Wall Street Journal*, and in the *New York Times* this week, there were a pair of articles. I think the *Wall Street Journal* was first, then the *Times* the next day, describing some economists thinking how they would approach appropriate policy to address the pandemic. Did you see either of those articles?

Scott Barrett: I didn't see it in those papers. It's possible that someone sent me an email about that.

Robert Stavins: So to ask you a question, let me describe one facet of them.

Scott Barrett: Go ahead.

Robert Stavins: And that is there was a focus on the potential use of a benefit cost framework, or net present value analysis. And therefore, both articles raised the correlated need to quantify the benefits of reduced mortality risk, in order to be able to compare them to the economic cost. And that brought up the whole notion of

VSL, value of statistical life, which is quite controversial, certainly outside of economics, it is maybe within economics. I would just would love to know what your thinking is about that.

Scott Barrett: Well, as a general matter, I'm very much in favor of doing this. Actually, recently, I was appointed to a strategic advisory group at the World Health Organization, on the possibility of eradicating malaria. And I believe I'm probably the first economist to be invited on to a body like that.

And the thing I've been trying to impress upon those people, which I think they have warmly accepted, is the need to do benefit cost analysis, in this case, it would be about getting rid of a disease that's already present. And I think with the value of a statistical life, it is a vexing topic for a lot of reasons. But I think it's very important that we make as explicit as possible, the consequences of different choices that can be made.

And if people feel uncomfortable with a number there, which I would understand, what you really want to do is ask the right question. And then having done that, use the analysis to say, "Well, how important is that number in arriving at the answer?"

Robert Stavins: Right. The sensitivity analysis is often what's key.

Scott Barrett: Yeah, sensitivity, but also framing, right? I mean, you often don't need to know what the number is. You need to know is it big enough, for a decision? So I feel in so much of the work we all do, I feel that there's a combination of art and science. And if you approach it that way, I think you can have more success with the work.

Robert Stavins: So let me ask you this, is that it would seem to me that an additional potential role for economics in terms of identifying appropriate policies going forward for this current pandemic, an additional use of economic analysis that would avoid the controversy and the necessity to use VSL. And would also avoid the necessity to get into the tremendous uncertainty there is on the biophysical side in terms of saying what those benefits will be, what the mortality will be in the future.

Then instead, there is a lesson that could be learned from what economists are doing in climate change policy and in other areas of environmental policy. And namely, instead of doing benefit cost analysis, doing cost effectiveness analysis. Take some policy objectives given such as maximum mortality number, target mortality risk reduction, or more simply the specified case transmission rate, and then compare alternative policy instruments.

And compare them in terms of their respective economic costs which might include the current approach of social distancing, selfless isolation to suppress the curve, but might also include what people are talking about increasingly, it

seems, a targeted approach to reduce emissions, more testing, more contact tracing, and more and better facilities to separate out those who are really sensitive and those who need to be treated.

What do you think of the potential use of cost effectiveness as a useful tool in this current policy situation?

Scott Barrett:

Okay, so a couple quick thoughts. I mean, first, in the area of public health cost effectiveness analysis is a dominant. It's the most important tool that's used. That's certainly true with infectious diseases, but I think it's true of all of public health. Typically we'll see calculations done for a particular intervention, in terms of dollars per DALY, it's called disability-adjusted life or something like that.

It's fine that this... This again, this is 99% of work is done in this area and is fine. I think for a lot of the decisions we're interested in, that's not the right way to go. I think you want to focus on using cost benefit analysis. I mean, certainly for a decision should we eradicate a disease? Should we develop a stockpile of vaccine in the case of an outbreak? All these kinds of decisions, I think that they're much more appropriately looked at, in a cost benefit framework.

I'd say on the current crisis, COVID-19, I think, my first thought would not be, "Hey, we just need to do a lot of cost benefit analysis". I mean, we are facing a crisis, lives are at risk and there's a lot of uncertainty. And I think the logic has been explained pretty well by the medical community that we don't have the tools we want. We don't have vaccines; we don't even have treatments; and we don't have hospital capacity.

By the way, these are things that people have been arguing we needed to have. But we made choices, and we are where we are right now. And I think that what we're talking about right now, is kind of a triage. Which is a kind of cost effectiveness analysis that's done by docs in ER rooms all the time, emergency rooms all the time. And that's basically what they're doing, if they have to ration ventilators and so on, that's what they need to do.

One last thing I want to say about this is when people started talking about cost benefit analysis, the focus is often on the totals, and not about the distribution, of the costs and benefits. And one thing we can say about COVID-19 right now is that it's a pretty equitable scourge. I mean, you've got healthcare workers and people working in grocery stores, and you've got Tom Hanks, and you've got the wife of Prime Minister Trudeau all infected.

So in a way it's a kind of a nice thing, if I could use that expression, that it's kind of an equitable. And it's in everyone's interest now that we control it. I think just the last thing I want to say, Rob, maybe we could shift to another thing is, I think the externality side to this is really interesting, and I think it's really significant. So that's just one, raise a topic with you.

Robert Stavins: Well, the whole notion of an infectious disease is itself an externality, right? That a carrier gives it to someone else, that's an externality.

Scott Barrett: Right, and what's happening is people are taking really quite radical... I know the news is filled with stories about people aren't doing what they should be doing. But really what's impressive is how many people are doing what they should be doing.

Robert Stavins: Yeah, I agree. It's striking, I wouldn't have thought that this would be possible. Before we wrap up, I want to take you back to something that's a broader question about your research portfolio. And I know this is like asking you to identify your favorite child, but looking at your entire long, long CV across many different areas, climate change, infectious disease, other areas. What is the one publication you are most proud of? And I'll already condition this by saying that present company, co-authorship should be excluded of course.

Scott Barrett: It's my first book.

Robert Stavins: Is that right? Okay.

Scott Barrett: Yeah, it was called "Environment and Statecraft."

Robert Stavins: I know the book, it's a wonderful book.

Scott Barrett: I spent seven years writing it. Now, it wasn't the only thing I did in those seven years. And I wrote a lot of papers, which I needed to get the materials, so I knew what to say in the book. But what I like about the book... In our areas, we don't often write books. But some topics are so big, what you do with an article is you're coming up with a fragment.

And an issue like international cooperation on the environment, it's more of a mystery than anything else in my mind. So you collect all these fragments and imagine that you're the archeologists or the investigator, and you want to know, "Okay, if I piece together the fragments can I find the solution to the mystery to the puzzle?"

And that I find of everything I've done, the most gratifying. So the individual papers, I write, for me, they're always just pieces. And a book, I think at least has the potential to be a fuller image of what we're really trying to understand.

Robert Stavins: So my final question to you is, is really to ask for your prediction, or maybe I guess it's your best guess, of where we're going to be with this pandemic, a year from now. And the way I think about this question to you, Scott is, if you and I get together to do another podcast in March of 2021, and then I say, Prof. Barrett, could you please reflect back on what the world and the United States in particular have been through? What's your assessment? What do you think it's most likely, from where you sit now, that you may find yourself saying then?

Scott Barrett:

Well, I mean things are changing so rapidly. I mean, if you had asked me that two months ago. Yeah. So it looks to me like this is a persistent challenge. I know that China and some other countries have had some success in limiting cases. I think we're going to get better at it in some respects, but I want to go back to this thing that's very fundamental, it's in all my research, and it's the essence I think of economics.

Which is incentives and how incentives drive behavior. And what's critical about this is that if you live in an environment where it's risky to stand close to people, not to wash your hands, and all the rest of it, then you change your behavior, which is what people are doing now. So people are responding to a very powerful incentive for survival or their own personal safety.

As the disease becomes less prevalent, as you see less of it, the risk falls. And therefore, that behavior is going to be modified and people will take more risks. And so we're not going to... I don't want say, because we won't have technical remedies, it doesn't look like we're going to have a vaccine that would be available, at least for a year and a half, probably two years. That's a long time.

And the coronavirus seems to have evolved to be quite stable in the environment. So SARS was totally different. It wasn't a stable and on top of that you wouldn't transmit unless symptoms showed, so it was much easier to control. I think widespread testing is going to help a lot. And as people have noticed, as more people fall to COVID-19, if they survive they'll have immunity, at least for some period of time, because we're learning as we go.

But they'll have some immunity, so that will offer a measure of protection for others. So it's a really hard to know, but I think the battle is still going to be waged a year from now. We'll move a little bit more towards normalcy, via guess, these are all guesses.

Robert Stavins:

Yup.

Scott Barrett:

But it's still going to be there, it's still going to be there.

Robert Stavins:

Okay. So in that case, maybe I'll wait two years before I invite you back for another podcast discussion of this. Listen, Scott, thank you very much for having taken time to join us today. This has been fantastic. Our guest today has been [Scott Barrett](#), the Lenfest-Earth Institute Professor of Natural Resource Economics at [Columbia University](#), where he also serves as Vice Dean of the [School of International and Public Affairs](#).

Robert Stavins:

Please join us again for the next episode of [Environmental Insights, Conversations on Policy and Practice](#) from the [Harvard Environmental Economics Program](#). I'm your host, [Rob Stavins](#). Thanks for listening.

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