

Rationally Speaking episode 136: David Roodman on, “Why microfinance won't cure global poverty”

Julia: Welcome to Rationally Speaking, the podcast where we explore the borderlands between reason and nonsense. I’m your host, Julia Galef.

With us today is our guest, David Roodman. David is an economist. He has been a fellow at the Center for Global Development, a Senior Economic Advisor at the Bill and Melinda Gates Foundation, and currently serves as Senior Economic Advisor to the Open Philanthropy Project.

David is also the author of the book “Due Diligence: An Impertinent Inquiry into Microfinance”, and that’s what we’re going to be talking about today. David, welcome to the show.

David: Great to be here.

Julia: Microfinance is one of the approaches to helping poor people in developing countries that the international community, of economists and philanthropists, has probably been most excited about over the last few decades.

David, can you just give us the background, for those listeners who haven’t heard of it? What is microfinance, and why were people so excited about it?

David: Gosh, okay, so microfinance ...

Julia: In two sentences or less. No, I’m just kidding!

David: Microfinance is about providing financial services -- be it loans, or savings accounts, or insurance, or ways of transferring money from one person to another -- to very poor people.

If you’re providing financial services to people who don’t have much money, then it stands to reason that the service, the transactions, are going to be very small. They’ll be measured in tens of dollars rather than hundreds or thousands, and so that’s where the word “micro” comes from.

Julia: Right.

David: The initial excitement in our era began in the late 1970’s, coming out of some pilot projects providing loans to poor people, most famously in Bangladesh.

Muhammad Yunus, who would win a Nobel Prize about 30 years later for his work, discovered that he could make loans of a few dollars to very poor people in the village just outside the university where he was teaching, and they would pay back. It seemed to help them, in part because a lot of them were essentially in slavery to the local money lenders. He was able to lend to them at much lower rates and saw himself, in some ways, as liberating them.

Julia: Right.

David: Then, he became a very effective promoter of this idea both within the country -- so that he could scale it up to thousands, and then millions of people -- but also internationally. Over time, he and, I think, others discovered ways to talk about this idea, what was then called "microcredit" -- Although, I don't think Yunus ever called it that, except for a long time, but -- ways to talk about it that were very compelling for people.

A lot of those times, the loans went to women, so he could talk about empowering women. It was about giving people a hand rather than a handout, to use an old cliché. Helping people help themselves, rather than just deciding for them what they needed.

Julia: I can see how this would have appeal across the political spectrum, right? There's something in there for the liberals and for the conservatives alike.

David: Exactly, right. It's about self-direction, and pulling yourself up by your own bootstraps, which appeals to the right, but it's also about empowering women, which appealed to the left.

So the appealing way of talking about it, combined with the fact that it really was growing extraordinarily, especially in Bangladesh -- people were using the service voluntarily -- made it a very compelling story, starting in the 1980's.

Julia: Since then, have the winds shifted, and if so, how?

David: Yes, they really have shifted a lot. I think especially since about the financial crisis, in a way, which had effects on microfinance.

A few things have happened since about 2008, 2009. One is that researchers finally got around to doing randomized studies of the impact of microfinance, and microcredit in particular. I bet you've talked a lot about randomized trials on this show.

Julia: It has come up, yeah!

David: Yeah, and the preliminary results, looking out to 18 to 24 months after people started taking microloans, did not find any impact on poverty. This contradicted earlier, non-randomized, studies that found impacts.

These are the ones that are most cited too, so that was one headwind. Then, it became apparent that there were bubbles in microcredit in a few countries. In Morocco, in Nicaragua, a few others. And this began to pop.

In part because of the financial crisis, and the economic slowdowns that occurred, people realized that just as the credit markets can overshoot in wealthy countries, so they can even with microcredit. It's not immune to this problem. And so then people began to realize that there is such a thing as too much enthusiasm for microcredit.

Then, I think, perhaps the most difficult development was in India where the leading microlender, SKS, went public, turning its founders into millionaires. And that really began to rub a lot of people the wrong way.

At the same time, there began to be stories of women committing suicide because of inability to repay loans from the same lenders.

Politicians sensed this, and also, the news media picked on this. There came a day in October 2010 where in the state of Andhra Pradesh in India, which is the leading state for microcredit, the state government essentially shut down the industry overnight, citing these suicides.

And it just generated a huge amount of negative publicity. I think that the whole movement have not been the same since.

Julia: Can you give some context for this phenomenon of women borrowers committing suicide, by explaining what happens if a woman can't pay back her loan? Or, what kinds of leverage do the lenders, the microcredit institutions, have on their borrowers?

David: Yeah. Microcredit has often been presented as something that is designed in order to help people. And I don't mean to be too cynical about this, but...

One of the most well-known features of microcredit, as it was done in Bangladesh and India, is it was done in groups. Groups of five women would come together, and they would be responsible for each other's loans. This was often talked about in terms of providing a kind of social capital, or empowering way for women outside the home to find support, as they were working through their financial problems and figuring out how to use their loans.

But the reality is that things like the group mechanism were used because they made microcredit more efficient by increasing repayment rates. If you go into a meeting with five women, and you don't have the money on hand for your weekly payment -- because these meetings are weekly -- that's a source of shame. And so then it creates increased pressure on you to, somehow or other, get the money ready for each weekly meeting.

Then, if everybody comes to the meeting with the money in hand, then the loan officer can very quickly collect all the money and move on to the next village. Which keeps costs down for the microlender, and makes the whole thing practical.

But there is a sort of drive in traditional microcredit towards using social pressure on rather poor people in order to earn payback, and keep the whole thing running efficiently.

And that can take a lot of forms. One is the risk of public shaming, by an officer coming and knocking on your door, and rather loudly asking you to repay, within earshot of your neighbors. There is a potentially coercive element to this, which is not going to be nearly as visible to the likes of us, thousands of miles away, but it is part of how microcredit has often worked.

I do take the reports of suicide in India five years ago with a grain of salt, because I know that they were promoted by politicians with their own agenda. But I do think that the general sense that there is a coercive element is on target, and so this has to be borne in mind. And the real challenge is to figure out how to provide these financial services relatively affordably to poor people, without letting the system get out of control in this way.

Julia: I first heard about microfinance maybe 15 years ago, something like that, and was certainly excited about it. And then, in the last maybe 5 or 6 years, I started hearing this trickle of reports that new, more rigorous studies were finding a lack of effect on the metrics that we presumably care about, like poverty.

And I was surprised because it seemed like such a natural story that offering this service to poor people would make them better off.

So maybe you could just help me understand. What are the narratives behind the data from these RCTs saying that there's no effect? Is the lack of effect just positive stories being balanced out by these negative stories, of people ending up in debt and worse off for it, or is there something else going on?

David: That's a really good question. The traditional narrative has been about people getting these loans, usually women, and starting some kind of microbusiness.

Which could be buying a cow, just some kind of investment that can rather quickly yield income to pay back the loan.

There are few things going on. One is that poor people are using these loans probably a lot of the time to juggle their finances.

Something that all of you should read, if you're interested in this subject at all, is this fantastic book called "Portfolios of the Poor." Which does a wonderful job of using data, but also bringing living texture to how poor people actually manage money. And how financial services that we're talking about can fit into what they're doing.

Sometimes, people are using loans not to invest. At least not in something that will produce or raise their income within 18 months, but to discipline themselves into spending money on the things that are actually important.

You and I face temptations to buy potato chips, or whatever else that we may spend our money on, that we know are really not the top priorities, but we can afford it. When you're poor, and your income is unpredictable and volatile, you don't have a salary, navigating the financial challenges that you face every day and every month is much more difficult.

If you want to buy tea today, that may mean not quite enough money to feed your children tomorrow. It's really very tight. And especially women may have less power within their families, in their social context, to say no when people ask them to borrow money.

Loans can be a way for people to discipline themselves against their own worst impulses and against pressure from those around them to spend money on the less important things. If I know I really want to spend money on keeping my daughter in school, the knowledge that I have those weekly payments to make will make it easier for me to say no if my husband comes to me and asks me for money.

So, it's harder for me to spend money on things that are less important. A lot of times, what financial services are really for is not investment, but ways of tricking ourselves and those around us, so that we can, in a funny way, exercise more control over what we do with our money. By limiting the autonomy over our future selves.

Julia: Right.

David: That's a rather long answer. Now, it's possible -- I certainly hope it's the case -- that the woman who uses a loan to invest in her daughter's education will

ultimately raise her own income, or raise her daughter's income, but that could take a generation or more, and won't show up in these studies.

Julia: That actually brings me to a question I had while reading the studies of microfinance's effects. And I think you addressed this in your book as well.

Are we sure that poverty is in fact the right metric? The fact that microfinance is so popular should, I would think, be some indication that it's giving poor people something that's valuable to them.

And so maybe it's not poverty. Maybe it's income-smoothing, or maybe it's increased autonomy in terms of decision-making power in their family, or something like that. And maybe some of these things are harder to measure in a randomized controlled trial.

I guess I'm wondering: how much should we update our credence that microfinance is valuable from the fact that these RCTs found no effect on poverty?

David: Right. I do think that poverty is an important measure.

If the studies *had* found that microcredit was reliably increasing income, or increasing household spending, that would have been fantastic. It was actually worth checking for both. Because reducing poverty is, of course, important in itself, but also because many claims on behalf of microcredit were grounded in this idea that it was reducing poverty. So, absolutely worth checking.

And the fact that we're not finding much impact on poverty, over three or even five years, should lead some people to revise their expectations of microcredit.

But of course, poverty is not the only thing worth measuring, the only outcome we care about. You suggested that we could also look at consumption smoothing. I don't think I've seen much evidence that microcredit is helping people smooth their spending. I've seen a little bit of evidence that microsavings has done that, but maybe not quite enough to be absolutely sure.

Julia: Savings accounts?

David: Yes, small savings accounts. One study I have in mind was on people who already have businesses. They were selling in the market in Kenya. They offered them small savings accounts, and found that when it's offered to women, if I recall correctly, that there was a consumption smoothing impact. That's a jargon term for more often being able to feed your kids.

You know, I think about microfinance a little bit differently. I think it's absolutely worth running the randomized trials on the variables that we can measure over a few years.

But I also am very influenced by some sort of broader conceptions of the role of financial services in the lives of the poor.

I've already mentioned this book, "Portfolios of the Poor". What that book helped me understand is that, first of all, we all need financial services. In my own book, I performed an exercise fairly early on, where I list all the financial services that I use. I've got a checking account, and life insurance, and all these things. Then, I ask myself, "If I had to give up all of these but one, what would it be?"

I begged myself to allow myself to keep two. And the two that I think are most valuable are health insurance and life insurance. Because those protect my family -- I have kids -- from the financial consequences of the worst happening to me, by dying or becoming very ill. What that helped me realize is that financial services, above all, are about reducing risk.

Poor people actually live lives that are much more risky than my own. Their incomes typically are not as predictable because they don't have health insurance. A broken leg can be an economic catastrophe for a family of manual laborers, and so they actually need financial services more than you and I do. To suggest that this is just a luxury, I think, just fundamentally misunderstands how they have to live.

In that context, savings, credit, insurance, even money transfers all help them solve what is a fundamental problem. Which is the need to gather lumps of money for important spending purposes, whether it be to buy a cow, or pay school fees, or cover a health bill when the husband gets sick.

Because you can either borrow, when your husband gets sick, to pay the bills, or you can draw down savings, or maybe you're really lucky and you have insurance, or your son in the city can send you money. All these things help solve this fundamental problem. And I just think that that is so important that it is worth continuing with this movement, this enterprise to try to bring financial services to poor people in a way that is safe for them.

Julia: But why wouldn't those functions show up in the data? Presumably, if you can take out a loan to cover yourself when your husband is recovering from a broken leg and can't bring in money, why wouldn't your income be higher in that world than in the counterfactual world where you couldn't take out the loan?

David: Great question, and I don't know if I even have a full answer to it. I think --

Julia: -- is it just about priors? Where, like, our priors that this should be the case are so strong that even a few RCTs showing a negative result aren't enough to overwhelm it?

David: I guess so. I guess what I'm talking about here is primarily reducing risks, so that is about reducing variance of income and consumption. That is harder to measure, because the data get noisier.

So it can be harder to find the difference between control and treatment groups when you start looking at these measures of the second moments, the second order effects.

There will also be negative stories of people who get in trouble because they borrow too much.

The way I adjust my priors because of these randomized studies, that don't show any clear impact on average poverty over a few years, is I think that the case for subsidy to microcredit goes down. I think we should be thinking more in terms of making a self-sustaining industry. We can give startup funds, but we shouldn't be investing massive resources in this.

Julia: Why is that?

David: I'm sorry. I guess I wasn't really clear. When I say "we", I mean as donors and philanthropists.

Julia: That, like, if this is a valuable service to the poor, then it's something that should be able to sustain itself as an industry?

David: Yeah. Right. I think it will need to sustain itself as an industry. Because it's hard for me to justify pouring large amounts of aid or philanthropy dollars into it when there are other things that we are more sure will help in the short term.

But if we can help launch a financially self-sufficient savings bank for the poor, that to me seems like a good thing if we're talking about startup funding.

Julia: All right. While we're on the subject of RCTs, one last question.

Something that could be interpreted as a tension in your book, I think, is that on one hand, you're more rigorous in your evaluation of the data and the studies than the average person looking at microfinance. Yet, you also express a



skepticism about how much we really can learn from randomized controlled trials.

The next thing I'm going to say isn't your own view, but just my view that I'm adding to the point: When I look at economics, there are studies -- for example, in behavioral economics, people run randomized controlled trials, to study how people behave in certain situations.

And this is in one sense more rigorous than observational data. But there's this additional source of uncertainty that you have now, when you look at whether or not you can really generalize the results from this artificially created experiment in the lab to real-world behavior.

And that uncertain generalizability is less of an issue, I think, in RCTs that are done with actual microlending institutions in actual countries with actual poor people. But there's still some element of artificiality. There's only certain institutions that will agree to participate, and the way that you set up the randomization is artificial, so they're not lending to the same kinds of people that they would if you weren't randomizing, or something like that.

So my question, after this long-winded introduction, is: to what extent do you think there's a problem trying to generalize from these RCTs to how microlending actually works?

David: Okay, so you raised two issues there. One is to use the technical term about external validity. It's like, "Okay. We got a study that tells us the impact in one setting. How easily can we generalize to other settings?"

You certainly can raise some questions about the studies that have been done of microcredit, and also microsavings. Like you might say that the sample, the set of microfinance institutions who are willing to cooperate with scientists wanting to run randomized trials, is itself a very nonrandom, non-representative set. Probably lots of organizations would just never consider randomly withholding their services from certain poor people. They would consider that unethical.

So, we're working with a non-representative group of microfinance institutions. There may be a bias towards looking at countries where microfinance is growing very rapidly. Because typically, the way these are done is the researchers work with a microfinance institution that is growing. Because it's growing, and can only grow so fast, it's willing to randomize which neighborhoods it goes into first.

There are certainly ways you can criticize these studies. That said, we now have five, maybe more, studies of the impact of microcredit, in quite a diversity of

contexts. Rural Mongolia, Urban India, Bosnia. And they're generally telling about the same story.

And so I think this is actually a pretty good example of where you get enough of these randomized trials, you can start to generalize with reasonable confidence.

Julia: Right, that makes sense.

David: But you're right. Even though I am pretty rigorous in looking at what the studies say and how much we can believe, I don't think that they are the final word on the broad question of whether microfinance works. It's just one piece.

Partly, it's because there is this generalizability concern you just raised. I think a bigger limitation is that they can only track over a few years. And as I said, I could imagine that some of the impact would be generational. If a couple can manage their finances better, then that may ultimately accrue to the benefit of your children. It may not show up for a long time.

There's always noise in the data, and limitations on what we can measure. I write about that in the book. I try to get people to visualize what it's like to have one of these surveyors working for a randomized study come to your door and start asking lots of questions.

This person may be visibly from a different class than you, or have a different accent. They may be asking you very personal questions, about how much you spend, or asking you questions that you can't remember the answer to. Like, if I ask you how much you spent on milk last week, would you know?

Julia: Right.

David: But that's the kind of question that's in the survey.

And these questions can go on for a long time. There could be hundreds of them. When life is tight for you, you are much more uptight, I think. At least in a situation like that where you're engaging with a stranger. You're thinking very sharply about what's in this for you, and so you can imagine people guessing what answers the surveyor wants to hear, whether or not those are the truth.

There's all sorts of noise in the data that doesn't bias the results necessarily, but -- well, it can bias them towards zero. So I just see them as one input to a broader analysis of the impact.

Julia: You briefly alluded to other interventions that we should have more confidence in than microfinance, in terms of raising people out of poverty. At least in the short term.

I'm wondering, first, what you were referring to; and second, whether that view is in conflict with, for example, William Easterly's claim that we just don't know what helps poor people in developing countries, and we should stop pretending that we do.

David: Yeah. I work now for GiveWell, which is probably familiar to a lot of your listeners.

Julia: Actually, Holden was one of our earlier guests, a few years ago.

David: Okay, yeah. This is a job I've just taken since February, long after I had finished my work on microfinance.

Part of what GiveWell does is really try to find charities that really are making a difference, with a strong evidence base to back up that claim. And so they make recommendations -- or I should say, we make recommendations -- on some very specific interventions. Like some particular organizations that are distributing bed nets, or engaging in deworming, these kinds of things.

Those recommendations are made, both on a very careful analysis of the effectiveness of the actual organizations, and on a review of the academic literature, of checking whether the interventions actually do work. Almost always, there are randomized studies behind that.

So I'm fairly confident that there are things you can do with your money right now that will save lives. They won't make Nigeria into the United States, but they can make a difference in the short run, with more reliability than would an investment, say, in microfinance.

Now, I'm not saying that you should only give your money to things which have a very high degree of certainty of a short-term impact. Part of what GiveWell is now doing is looking at investments that are much more risky. Like trying to support organizations that will influence criminal justice law in the United States, on the idea that there are too many people in prison. That's a venture that could completely fail, but seems like a good bet.

So my point is there certainly is a place for doing philanthropy and foreign aid where there's less certainty of outcome. But if you want some things that are relatively proven, I think we have them.

Julia: What do you think is the most promising sort of structural intervention that might help developing countries develop? Or is there just nothing you would put any confidence in right now?

David: Oh, golly...

Julia: (laughs) I don't think I've ever made a guest say, "Oh, golly," before! This is a first for Rationally Speaking.

David: Really, the biggest thing has to be a serious policy in wealthy countries to reduce carbon emissions. So the answer would be a carbon tax. This would be a tax on the consumption of fossil fuels, levied in proportion to their carbon dioxide producing potential, across all wealthy nations. With a commitment to raising that tax every year the next few decades.

Julia: I'm assuming that that's not to help raise developing countries out of poverty now, but to prevent even worse outcomes on those countries from the effects of climate change, decades into the future?

David: Absolutely. Also, based on the idea that we can't expect poor countries to start reducing carbon emissions until we in the wealthy world have already begun to do so in a serious way.

Julia: Okay, David, one other question I wanted to ask you is: You have this interesting taxonomy that you lay out in your book, of different ways of thinking about development, where reducing poverty is only one of them. There are two others. Could you talk a little bit about that?

David: Sure. I should say that I see reducing poverty pretty much as the long-term goal. But sometimes, you have to look for other desirable things as intermediate steps.

When I was starting to understand microfinance, reading a lot, talking to people about what they thought it did well and did poorly, I needed to organize what I was hearing. I realized that most of what I was hearing could be fit under one of three categories, and this amounted to different conceptions, different definitions of the word "works." As in, "Does microfinance work?"

They also corresponded to different definitions of the word "development," at least in English.

The first one was the one that was mostly famously associated with microfinance, which is development as *poverty reduction*. Within the

microfinance world, it's correspondent to the claim that microcredit in particular is known to reduce poverty among the borrowers.

Investigating that claim led me into a certain area of inquiry. Primarily having to do with studies done by economists, very quantitative studies, and led me into discussion of randomized studies, and nonrandomized ones, and so on. I came out thinking that we really hadn't proved that microcredit directly reduces poverty within a couple years.

There's also this notion of development as *freedom*, which is most associated with the writings of Amartya Sen, who wrote a book by that name. Amartya Sen says that just thinking about development as higher income is really too narrow. What development really is, is about having more control in one's life, and there are many different kinds of freedom, many sources of freedom. One certainly is having higher income -- but also having the right to vote, living in a society where both genders have the same amount of power, and so on.

A lot of these freedoms reinforce each other. So as he famously pointed out, the freedom of the press in India helped prevent a famine in the 1960's. Whereas the lack of freedom of the press may have contributed to a huge famine in China in the 1960's.

In the context of microfinance, this frame leads us to ask, "Well, does microfinance enhance freedom? Does it empower people?" That leads to a more anthropological literature, people who have spent months or years living with people doing microfinance, trying to assess whether those who used it got more control over their lives. Certainly, there are stories of women who are empowered through microcredit.

On the other hand, it also leads to the question of, "When is an interest rate too high? When is microcredit usury? When is microcredit, as we talked about earlier, actually coercing people rather than empowering them?" There's discussion in the book about that. And I come away feeling much more confident that microsavings is going to be empowering than microcredit, because of the obvious risks of getting people into too much debt.

The third and last conception is development as *industrial transformation*. This is associated most with Joseph Schumpeter, who coined the term "creative destruction". This is the idea that the essence of development is not just numerically rising income, but fundamental, perpetual transformation of society. All aspects of society -- economic, politics, social.

If you see this as the essence of development, instantly there's a strong case to be made that for Nigeria to become United States, it has to undergo decades of a very thoroughgoing process of transformation.

Then, the question is, "Does microfinance contribute to it?" I don't think that microcredit, or the other financial services under my heading of microfinance, turn the clients into agents of Schumpeterian transformation. They're not going to go found Google or General Motors, and just change how the economy works through their action.

But I do think there's a case to be made that the microfinance industry is itself an example of constructive transformation. If you were creating a new industry, or extending existing industry to serve a giant segment of the population that wasn't served before, that enriches the economic fabric of the country. And is, in my view, a kind of development.

Now, if we thought that microcredit was as bad for people as cigarettes, we wouldn't celebrate that -- any more than we would celebrate the growth of the cigarette industry. But as we've already discussed, I think especially if there's a de-emphasis of microcredit, there are reasons to believe that microfinance does serve poor people in the long run. Therefore, that it's a good thing if we can expand the industry to provide those services to poor people safely.

Julia: I think we have time for one more question. So I'd like to ask what you think the right takeaway is from the -- not to be overdramatic, but -- the rise and fall of microfinance, on the international development stage.

Like, for example, is the takeaway, "We shouldn't get too excited about something until there are randomized controlled trials"? Or would you pick a different takeaway?

David: I'm torn. On one hand, there's the easy lesson that you just suggested -- that the excitement got ahead of the evidence. And as a result, a lot of money was wasted. And maybe people may have even been hurt because of the overly rapid growth of microcredit in some countries. That is a natural lesson, and I think it's a valid lesson.

I say that with a lot of humility, though. Because I think of myself as a critic rather than a playwright. Someone who kibitzes from the sidelines, rather than actually rolling up his sleeves and getting things done in the real world.

Julia: Right.

David: I know that often, if you want to get something done in the real world, you can't be too careful. Sometimes, you just have to barrel ahead. And it's never going to be perfect.

I do have to acknowledge that Muhammad Yunus, even though he probably overestimated the benefits of his work, did change the world. And did create a movement that I think is increasingly constructive, because it has learned the lessons of these bubbles, and has slowly absorbed the messages of the randomized trials.

Improving financial services for poor people is a good thing. And I don't know that we'd be as far along as we are now, globally if it hadn't been for the headstrong work of the likes of Muhammad Yunus.

It's a mixed lesson. Sometimes, if we're too careful, we won't make change.

Julia: Right. Excellent. All right, we are just out of time for this section of the podcast, so I will wrap things up, and we'll move on to the Rationally Speaking Pick.

(musical interlude)

Welcome back. Every episode, we ask our guest to introduce their Rationally Speaking Pick. That's a book, or a website, or a movie, or something else that tickles his or her rational fancy.

David, what's your pick for this episode?

David: My pick is a book called "The Origins of Political Order" by Francis Fukuyama, who is a very famous political scientist. You might have heard of him as the originator of the phrase "The end of history".

Julia: "End of history," yes.

David: Yeah. It's commonly pointed out now that history hasn't ended since he wrote that paper, but he really is a fantastic analyst and writer. And this book is a magnum opus, or part 1 of the magnum opus.

It provides a predominantly political history of India, China, Europe, and then the United States once it came along. And it's a comparative history of these regions. I guess the Middle East as well up through 1800.

It really helped me appreciate what makes China different from India, and what makes China today so much like China of 2,000 years ago. The continuities over

time are really quite extraordinary. It's one of the books I've read recently that has most helped me understand the world.

Julia: That is a great teaser. Excellent. We'll put a link to that, as well as your own book, "Due Diligence", up on the podcast website.

David, it's been a pleasure having you on the show. Thank you so much for joining us.

David: It's been a pleasure too.

Julia: This concludes another episode of Rationally Speaking. Join us next time for more explorations on the borderlands between reason and nonsense.