## THE BROOKINGS INSTITUTION

## **BROOKINGS CAFETERIA PODCAST**

## REGULATING MARKETS MOST EFFICIENTLY

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### PROCEEDINGS

DEWS: Welcome to the Brookings Cafeteria, the podcast about ideas and the experts who have them. I'm Fred Dews.

Government regulatory policy is a sprawling topic—some people reflexively recoil at the idea of regulation, but regulation also keeps our food and medical supplies safe, helps improve environmental quality, and protects consumers, among other goals. On this episode, I interview Sanjay Patnaik, director of the Center on Regulation and Markets at Brookings and the Bernard L. Schwartz Chair in Economic Policy Development. He discusses the mission of the center, and also talks about his own research on topics like climate resilience and carbon pricing.

Also on this episode, David Wessel, director of the Hutchins Center on Fiscal and Monetary Policy, offers his views on why inflation *expectations* are extremely important.

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First up, here's David Wessel.

WESSEL: I'm David Wessel and this is my economic update. You're going to hear a lot about inflation expectations in coming weeks. Here's why they are increasingly important.

Inflation expectations are the rate at which people—consumers, businesses, investors, financial markets—expect prices to rise in the future. They matter because actual inflation depends, in part, on what we expect it to be. If everyone expects prices to rise by, say, 3 percent over the next year, then businesses will want to raise their prices by 3 percent at least, and workers and their unions will want similar-sized raises. All else equal, if inflation expectations rise by one percentage point, actual inflation eventually will rise by one percentage point, too.

Now, the Federal Reserve is keen to keep inflation expectations "anchored," as they put it. They want everyone to be confident that the Fed will keep inflation around its stated target of 2 percent no matter what is happening at the gas pump or the grocery store or the used car lot. If people and markets believe that the Fed can keep inflation around 2 percent, then they won't anticipate a lasting increase in inflation when some prices rise, as they have recently when a cyber hack disrupted the gasoline pipelines or bottlenecks emerged as the pandemic lockdown eased. You might call this the Tinker Bell Theory of monetary policy—if we all believe that inflation will be stable, it will be.

You can get minute-by-minute readings on stock prices or on the yield on the 10-year U.S. Treasury note. Once a month you can get an official count of the number of people who are unemployed. But measuring inflation expectations is harder. There is a survey of consumers that the University of Michigan conducts. There are surveys of professional economic forecasters. And there is information in the prices of Treasury bonds that automatically adjust with the consumer price index. But none of them send precisely clear signals.

Simply put, though, the Federal Reserve will keep interest rates low and tolerate a small uptick in consumer prices; indeed it says it *wants* to see an inflation rise a bit above 2 percent for a time to compensate for the past several years when inflation was below its 2 percent target. But they're counting on inflation expectations remaining steady.

Right now, some measures of inflation expectations are beginning to move up, a hint that not everyone is convinced that the Fed has the will to raise interest rates soon enough to thwart an unwelcome increase in prices. But according to the minutes of the last meeting of Fed policymakers, "many" of them—presumably then not all—believe various measures of longer term inflation expectations remain comfortably well-anchored around 2 percent.

So far.

DEWS: You can listen to more Wessel's Economic Updates on our Soundcloud channel.

And now, here's my interview with Sanjay Patnaik.

Sanjay, welcome to the Brookings cafeteria.

PATNAIK: Thank you so much for having me, Fred.

DEWS: It's nice to meet you virtually, but I'm pleased to have this opportunity to talk to you about you and your work. Can you first introduce yourself to listeners? Talk about your background. I think you're relatively new to Brookings.

PATNAIK: Yes, I started at Brookings in 2020 when I took over the Center on Regulation and Markets and I was trained as an applied economist with my doctorate at Harvard. And prior to starting at Brookings, I was a faculty member at George Washington University and a visiting fellow lecturer at the University of Pennsylvania. My research really focuses broadly on multiple areas, including climate policies, specifically carbon pricing, business and government relations, corporate political strategy, globalization and international business. And I'm particularly interested in emissions trading programs and in their role in mitigating climate change and the effect of firm behavior. So, over the past years, I've conducted extensive research on the European Union emissions trading scheme, which is one of the most important regulatory programs for greenhouse gases in the world. And the more recent work, I'm starting to focus on how companies and governments can reduce the exposure to climate change by treating the problem as a risk management issue.

DEWS: Now, if listeners are interested in learning more about you and your background, they can visit our website, brookings.edu, where your bio, CV and all that stuff are. You started in 2020. Does that mean you started after Brookings went to work from home for the pandemic?

PATNAIK: Yes. I completely on boarded virtually and I have to say it has been a really good experience, a very smooth experience. Our team works very well together. We are a small team but we are very enthusiastic and we have regular team meetings to form a team culture. So it's been actually a good experience.

DEWS: Interesting. Cool. So, can you talk to me more about the mission and the vision of the center, the Center on Regulation and Markets?

PATNAIK: Yes, of course. So the Center on Regulation and Markets really is focused on understanding new markets and how to regulate them most efficiently. And so traditionally, we have had multiple areas of regulation, financial market regulation focus that is being worked on by my colleague Aaron Klein. And then the regulatory process, which is being led by one of our colleagues, our external contributors, Phil Wallach. But since I took over, I added three new focus areas. One of them is artificial intelligence and emerging technologies. The second one is climate change because of my own work. And the third one is consumer protection, broadly speaking, which includes things like food safety, antitrust, et cetera.

And the reason behind these areas is really that over the past few decades, we have seen rapid technological growth that has transformed entire industries and we see new business models emerging. And in a wide variety of sectors—including telecom, transportation, biotech—these markets have undergone significant and disruptive changes. And this really creates a more challenging regulatory environment for regulators.

To give you a few examples, right, regulators are often confronted with rapidly evolving technological landscapes, facing pressures to adapt their regulations dynamically. And in addition to that, many markets they regulate are, in effect, global markets, but their jurisdiction is only national or local. And then we also see, especially in the artificial intelligence sphere,

unprecedented innovations that require new approaches to regulation that are flexible without undermining the public interest role of regulations or stifling innovations.

DEWS: All right, well, thanks for that. And so that leads me to ask you what I think of as a very broad question when people hear "regulation," especially government regulation, it might give them an uneasy or a bad feeling. So I want to ask you if you could just, and again at a high level, what are government regulations for?

PATNAIK: That is a really good question that there's a very simple basic answer. I always used to talk about it at length with my former students, because it's very simple. The main function of government regulation is to correct market failures. And so when we look at markets as economists envision them in their offices, those are ideal markets. Those are markets that have perfect information, perfect competition. But as you know, in reality, most of the times we don't have markets like this. And so when market failures occur, we need the regulators to step in and correct those market failures so that the markets can function more efficiently.

To give you a very concrete example that is very recent with the COVID crisis: let's say you have a pharmaceutical company that develops a medication or a vaccine. Right? That company knows what the side effects are, what the potential bad effects of the medication are and how it works. But a customer doesn't know that. Right? And so there's an information asymmetry between the company and the customer. And without any regulation, the customer will be taking a bet that the company is not hiding anything or there are some bad side effects. That's why we have the FDA. And so the company has to go to the FDA, go through a very rigorous approval process to reduce this information asymmetry and make the market more efficient, because then the customer can be sure this medication has been checked, I can trust it and I can take it.

And so without regulatory frameworks that are in place, these market failures can really hamper the efficiency of markets. But it is important to point out that it's a delicate balance to strike for regulators. Right? That you want to correct those market failures, but you don't want to overregulate to maybe impede innovation. Right? Or, even worse—what happens sometimes—allow companies to unduly influence regulators, which we call regulatory capture or rent seeking, and then these companies actually using regulations maybe to put up barriers to entry for other companies.

DEWS: Thanks for that. And it strikes me that the Center on Regulation and Markets is looking at where that balance is. I mean, tell me if that's wrong, but it seems like that's a very important area of public policy, to try to find where does innovation and where does regulation benefit markets, but also where maybe less regulation can benefit innovation. In one of the other critiques that people might have about regulatory policy is that it's just increasingly complicated. And also regulations tend to never go away once they're enacted.

PATNAIK: So that's a simple [answer] why they're more complex, it's because markets are getting more complex—markets and technologies. And so it is more difficult, as I said, for regulators to regulate a lot of these new technologies, especially as the markets are global or very strongly interconnected. Right? If you are starting to regulate the market in the United States, that can be a development that affects the markets outside of the U.S., which is outside of your jurisdiction. And we see these things happen all the time.

Another reason is that I would say over the past 20 years, we have seen both Republican and Democratic administrations increasingly rely on regulations within the executive branch to implement their agenda. Because of the lack of bipartisanship, because of polarization, it has become more difficult to implement large scale legislative packages, as you know. And so

oftentimes what administrations do is they use the regulatory authority of their agencies to try to push the agenda through that way.

One of the downsides there is that oftentimes you have these pendulum swings. And actually what we do see here is that there are actually regulations being rescinded quite regularly, but it often happens when a new administration takes place. Right? Climate change is a very good example. Under President Obama, there was a lot of action on climate change, especially with the EPA. Then President Trump came in. He rolled some of those things back. And then Biden is trying to do the opposite again. And so obviously, most companies would prefer to have a more stable approach. They don't like this pendulum swings. It's not good for investments. But unfortunately, because of political realities, that's what we have seen over the past couple of years.

DEWS: You mentioned a few minutes ago that one of the focus areas of the center is AI and emerging technologies, among some others. So I wanted to ask you, Sanjay, how do you and other researchers in the center stay on top of these rapidly changing markets, especially in the areas like technology, pharmaceuticals and so on? And also, and you mentioned this a few minutes ago, too, it's not just in the United States. It's a global phenomenon. How do you stay on top of what's going on?

PATNAIK: Yeah, I think the key here is really to look at both sides—at the business side of the market side and at the regulatory side. I think traditionally regulatory economics has really mostly focused on the policy side and ignored the business side, the side of how managers think, how firms behave. And so what we are trying to do here at the center is really to incorporate both and to have continuous interactions, both with business executives and managers to, for instance, stakeholders in Silicon Valley, but also with policy makers. And so we have, for instance, a new

series of fireside chats where I sit down with business executives, with regulators to see what are the most important, most recent topics that are of concern for policymakers and business managers alike.

And so what we're trying to do here is we need to try to catch market trends before they evolve into a regulatory issue, because oftentimes regulators are five to 10 years behind the technology. And then when it becomes a problem, they start thinking about how to regulate it. But we are trying to build a pipeline, communications, I would say, with the community, let's say, that works on these new technologies in Silicon Valley and the D.C. policymaking community to really kind of like broaden the scope of the regulatory perspective to include both sides.

DEWS: I think one of those recent fireside chats was with an executive and venture capitalists, I think his name is Bill Tai about NFTs. And I'm just going to be honest with you, Sanjay, I've seen NFT's explained a lot and I still don't know what they're for. And where can people find those kinds of discussions?

PATNAIK: So, you can just go to our website of the Center on Regulation and Markets and then go on to the new series, which is called Reimagining Modern Day Markets and Regulations. And you will have all these video recordings on there and a lot of articles. We also commissioned a lot of reports that talk about these new topics. For instance, we had one on robots and automation and we have a few of those coming out. So, I would invite everyone to go to our website and look at these most recent postings to get a sense of these important topics.

DEWS: Excellent. I'd like to shift now from talking about the center and its research scope itself, to talking about your work on climate policy, climate change policy. Let me ask you first, what is the role of regulation in creating climate change mitigation strategies?

PATNAIK: So, I think one key to keep in mind here is climate change is a very complex issue and there's overwhelming consensus among economists that without some type of regulation, we will not be able to solve it. And the reason is going back to my earlier point about market failures, right, climate change is a clear market failure. It is what is called a negative externality. To give you a simple example: if I'm a factory owner and I produce poisonous chemicals and I release those into the river next to my factory and those chemicals then kill off the fish downstream and the fishery cannot produce, I am not bearing the true cost of my operations. And so this is a negative externality. And so the regulator has to force me to actually dispose of those chemicals in a safe manner, which increases my costs. But it actually make sure that I bear the true cost of my operations. And so these costs are internalized.

And climate change is exactly the same. We are emitting carbon around the world and most of us are not paying for it because it basically goes into the atmosphere, changes our climate, and then the cost of being borne by those people that are affected by extreme weather events, by floods, etc.

And so without regulation, we won't be able to solve it. And the big key to what most economists agree, and I do as well, is we need a price on carbon. We need a price on every ton of CO2 that gets emitted because that will shift behavior in the market and investment towards low carbon alternatives.

DEWS: Can you talk more about how carbon pricing works? You and other economists at Brookings have talked about it for a long time. Is that something that the individual, the end consumer, might pay? Is it something that businesses pay but then pass it on to consumers? How does a carbon price actually work in our industries and our manufacturing in our daily lives?

PATNAIK: It really depends kind of like what model policymakers pursue and then also on the country context. There are two traditional ways that policymakers usually think about a carbon price. One is a carbon tax. The second one is what is called cap-and-trade or emissions trading. And so the idea behind both is to basically impose the price of carbon on industry, basically on factories and manufacturers. And so then obviously they have to incorporate those costs into their operations. Whether the costs get passed on or not is really an empirical question. It depends on the industry, how competitive it is. It depends on innovation. Right? Maybe a company actually finds ways to reduce carbon, and they can avoid some of that. And so the idea is really to make it costly to emit carbon so that companies become more innovative and reduce their carbon footprint. There is a potential that some of it gets pass through to customers, but it really depends on the industry.

And also other ways where sometimes customers get charged directly. If we look in Europe, for instance, a lot of countries have, like, I would consider an indirect carbon tax on fuels for cars, on gasoline, which is also one of the reasons if you compare gasoline prices, for instance, between the U.S. and Europe, they are much higher in Europe.

But I would say the main approach that people are talking about is really at the industry level and thinking about ways to price carbon at the industry manufacturing level.

DEWS: I'll refer listeners to the work of Adele Morris, who's affiliated with the center, Brookings scholar Adele Morris. I know she's done a lot of work on carbon pricing over the years. I want to come back to some of the specific policy ideas for climate mitigation. But first, I want to ask about something that is called climate resilience. And you've written about this. And you're coauthor of paper in our Blueprints project series that was published in February. It was with Siddhi Doshi and Kelly Kennedy. And you wrote about how difficult it is to incentivize

companies to invest in improvement in climate resilience. So first of all, what is climate resilience? And second, what are those investments look like? And third, why is it difficult?

PATNAIK: Yeah, so climate resilience really means that a company is well prepared to withstand climate related risks. And so one thing that has definitely been, I think, not gotten as much attention in the past than it is getting now is really the issue of climate risks. And we see a lot of investors starting to worry about that. And so climate change can really pose a variety of different risks to companies ranging from physical risks to supply chain risks, stakeholder risks, regulatory risks, et cetera.

And so to give you an example, right, if you're a company and you have a supply chain that is not redundant, and then there's an extreme weather event that disrupts the supply chains, you're really vulnerable for your operations because you don't have the materials or the supplies that you need to produce your product. And we have seen examples of that maybe not related to climate change, but to other examples where suddenly the supply chain dries up.

And so what is critical for a company to become climate resilient is first to obviously reduce their direct carbon footprint because that will mitigate any risk of paying a higher carbon price in the future. But also looking at all these other risk factors and doing an assessment of how vulnerable am I as a company to these different risks. And then integrate that risk assessment into the strategic thinking.

And then you ask about how do these investments basically mitigate or make a company climate resilient. That really means that based on the climate risk assessment, companies should make targeted investments that can reduce some of those risks. For instance, maybe you will have two or three suppliers in different geographic regions of the world, say, a food company like Nestle Mars, right, that depends on cocoa and on coffee. It's much better to diversify your

suppliers. You can also reduce your exposure to physical risk. When you decide about where to locate your plants, start thinking about is this in an area it might be flooded in five years, right, regularly or is in the path of a hurricane. And even like what a lot of companies are already doing, for instance, having an internal carbon price, they already calculate their investment projects with an internal carbon price to prepare for potential external carbon prices.

And so the difficulty to make companies do it is obviously climate change. There's a lot of uncertainty and climate change—I don't mean uncertainty about climate change. We know climate change is happening—but uncertainty about the exact effects and where they will happen. And it's a huge, unprecedented systemic risk factor. And then a lot of those effects, they vary in their time horizon. They range from short term—we already see some of those effects—to medium term, to long term. And that is also very difficult for managers to grapple with. But I think if they start thinking about it more strategically and seeing it as a way to increase their competitiveness, that can really shift the thinking.

DEWS: So that is, in my mind, companies taking steps they should be taking to improve business performance, business outlook, especially now and into the future. What about how to incentivize companies to address climate change from their climate footprint, from their emissions standpoint? Is that something that companies also are doing or is that something that needs to be incentivized, or is that something that regulation really has to focus on to help companies and reduce their climate footprint?

PATNAIK: I think we need a carbon price for that, from the regulatory side. I mean, there are companies that do voluntary efforts and there's a lot about this now. But often those I think are not really significant or substantial enough to have any difference, make any difference. We really need that carbon price because if companies are forced to pay the carbon price, then

they really have to look at their entire operations and see how they can reduce their carbon footprint.

DEWS: Sure. So, going back to that paper I mentioned, that Blueprints paper published in February, you and your coauthors, you called for attaching certain climate conditions to COVID relief, corporate aid from the U.S. government. I know some aid bill, some aid legislation has passed since then. So has the opportunity to enact that kind of approach passed or are there additional things that the U.S. government can do to help incentivize companies to become more climate resilient, but also perhaps to mitigate their emissions?

PATNAIK: That's a great question. So we published that article before the big package for COVID was passed. And I think it is indeed a bit disappointing that the U.S. hasn't really followed other countries in that regard, because if you look at both Canada and the EU, they all included climate measures in their COVID repackages, which was a low hanging fruit. Right?

But I do think there is still quite an opportunity, especially with the upcoming infrastructure package that the administration is working on because infrastructure is so critical. And I think that a lot of improvements are possible in the United States on reducing the carbon footprint when we look at infrastructure, at green buildings, and really kind of like thinking more broadly about where do we want to build zoning laws, et cetera. And so I think there's a big chance here. And I also think that there's other ways through financial market regulation, for instance, which the Biden administration seems to be thinking about to incentivize companies to do so.

DEWS: Let me stay on some policy ideas related to climate change for a few more minutes, issues that you and your colleagues have been working on. And one of them is auto emissions. It's something we've been talking about in public policy for decades, probably for

generations, in fact. And also, I think what's very interesting is when a state like California, the largest state in the country, wants to have stricter auto emissions than the United States government wants to have. And then we saw in the Trump administration there was a conflict there. What can you say about the role of the regulation of auto emissions levels in both regulatory policy generally, but also in terms of federalism and in terms of climate change?

PATNAIK: I think it's a really critical sector, right, because transportation makes up for a large amount of our emissions. And so I think what strict fuel standards do, like President Obama pursued them and like California pursued afterwards, is to force automakers to really focus on that issue and come up with innovations and ways to reduce their emissions. And the EU is doing the same, by the way, in terms of the fuel standards. So, I think it's good to tighten fuel standards. I think it forces companies—Otherwise, there's a lot of complacency. But with those standards in place, it forces companies to think about ways how to, for instance, make cars lighter, for reducing their consumption of gasoline, even with the same mileage.

I also think that California is interesting because it is such an important part of the U.S. economy. I mean, it would be the sixth largest economy worldwide if it were its own country, that it often sets the regulatory standards and then the U.S. on the federal level follows. California's the only state that by itself has a large cap-and-trade program. There is a smaller one for the power sector in Northeast, but the California one is really comprehensive. It has set strict fuel standards. It has always a leader in a lot of other aspects of alternative energy. And so it's actually, I think, good that California has had this pioneering role because it puts pressure on the federal government. Why? Because if I'm a manufacturer, I don't want to deal with a patchwork of regulations in California and in other states. So if California implements that standard, there's a good chance that this will follow to the federal level at some point.

DEWS: I seem to recall that during the Trump administration and again, it's very recent history, the complaint was if California has stricter standards than the rest of the country, then that creates manufacturing uncertainty for us as car manufacturers. And we don't want to have that. And so the response wasn't, at least from the Trump administration it wasn't, to make the overall U.S. emission standard more strict. It was to try to force California to make its more lenient.

PATNAIK: It's a very complex challenge of federalism, I think. Right? I hear that argument offered. The same argument is also being brought up when you have a carbon pricing policy, and economists refer to that phenomenon as carbon leakage, which means that if you put up a carbon price in one jurisdiction, what will prevent the companies from leaving the jurisdiction and putting the factory up somewhere else? But it's actually quite interesting and I've done some work on it myself. It is a very potent political threat by companies and industries to say, oh, I'm going to pack up and leave and put my factory up somewhere else. But in reality, there's not much empirical evidence that this is happening. Why? Because it takes a lot of things to pack up a manufacturing plant, to move the supply chain, the spillover effects. So it's a threat that is often being brought up.

But I don't think the answer is to move to the lowest common denominator. I think the answer is even for thinking about the competitiveness of the United States, I think that's often overlooked. The rest of the world is moving on. The rest of the world is moving very rapidly to implement carbon pricing. For any listeners who are interested, you can go to the carbon pricing dashboard of the World Bank and they have a really good overview of more than 75 carbon pricing programs already either being implemented or already in effect worldwide. And so if the

U.S. doesn't jump on the train, we would be lagging behind in developing new technologies and having a seat at the table at the global climate negotiations.

DEWS: I'll find a link to the carbon pricing dashboard at the World Bank and put it in the show notes for this episode, in addition to some other things, I'll link to. Sanjay, I want to ask you before we start to wrap up about two recent episodes that we saw in energy markets. And as somebody just observing this as a layperson, I'm no expert, my general question is, do these represent a failure of regulating markets? And one is the widespread failures of electricity distribution in Texas during that big winter storm a couple of months ago. And the other one is the more recent shutdown of the Colonial Pipeline that services millions of customers throughout the southeast and the northeast from Texas to New York.

PATNAIK: So, I think these are very interesting instances. Let me start with the Colonial Pipeline. And so this is really one of the areas where the U.S. is very vulnerable, which is cyber security and the security of our infrastructure, the digital infrastructure. And what is interesting here is that about 85 percent of American critical infrastructure is owned by private companies, and there are very few regulations that govern how those companies must protect their computer networks. And so we see that hackers are increasingly attacking companies on a large scale. And the problem is a lot of those hackers are overseas. So it's very difficult to get a hold of them or prosecute them here on U.S. soil.

And what is interesting, I recently read an article on this specific topic, is that there's not really a federal agency in charge of protecting the American public and firms against hackers. I mean, you have the NSA that collects intelligence about cyber-attacks. You have the FBI that investigates them after they happen. And the Department of Homeland Security to try to protect government computers. But we don't have an agency that really actively works with a lot of

think that's something we would need in the future, given the importance of that infrastructure in our economy and also the vulnerability that we have been observing going forward. And I think also that companies need to be forced to shore up their cyber defenses, not only for infrastructure, but even for other ones to safeguard customer data. Right? Looking back at the breaches of Equifax, of Yahoo!, even Facebook. These are significant breaches of personal data and information that can be used to a detrimental effect for customers.

DEWS: And what would you say on the Texas case? Was that a failure of regulatory policy?

PATNAIK: I think it's an interesting case and we actually, we will have a publication of that soon in a few weeks on that by one of our contributors. I think Texas is a mix of a lot of different things, and I haven't really delved deeply into that topic. But I can say so far that I think it's a problem because there was too much decentralization in Texas. And the problem is sometimes when you have these more global challenges or large scale challenges like extreme weather events, what happened in Texas, you need to have some kind of more central coordination, either at the state level or the federal level. And I think we will see that going forward even more so with extreme weather events in the future.

DEWS: Okay, well, we'll look forward to seeing that paper. I know it'll be published on brookings.edu in the coming weeks. Well, Sanjay, as we wrap up here, I wanted to ask you if you wanted to talk more about what else is on your climate research agenda and also what's on the center's agenda?

PATNAIK: First, we are very excited, we are doing a lot of stuff on artificial intelligence.

We have a fireside chat coming up this month and we have additional articles that will be

coming out over the summer and in the fall. And then we are really ramping up more of our climate work, again, looking at things like financial market regulations and how those are being used to address climate change.

Another big project that we're working on is carbon markets and firm behavior on those markets, especially trading behavior. We now have really starting to get good data coming out of Europe that we're trying to analyze.

And another topic that is also my personal interest for a long time is really looking at corporate political strategy and rent seeking. Right? What the firms do to influence policies, to capture policymakers and what are the effects of those policies. So we are looking at market research questions in that area as part of the broader research agenda.

But I'm excited. We have a really enthusiastic team. We have a big team of external contributors that are providing a lot of interesting articles on a wide range of issues ranging from energy to automation to robots to all kinds of other important topics. And I would invite everyone who is interested in joining us in exploring some of those topics together.

DEWS: It's on our website, brookings.edu. Sanjay, I want to thank you for sharing your time and expertise with us today. It's been very interesting.

PATNAIK: Thank you very much for having me. It's been a pleasure.

DEWS: Again, you can learn more about Sanjay Patnaik and the Center on Regulation and Markets on our website, brookings.edu.

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Until next time, I'm Fred Dews.