TRANSCRIPT

"BOOK LAUNCH—THE VALUE OF EVERYTHING: MAKING AND TAKING IN THE GLOBAL ECONOMY"

A conversation with Jeff Madrick and Mariana Mazzucato

Introduction: Azzi Momenghalibaf

Recorded September 11, 2018

ANNOUNCER:

You are listening to a recording of the Open Society Foundations, working to build vibrant and tolerant democracies worldwide. Visit us at OpenSocietyFoundations.org.

AZZI MOMENGHALIBAF:

Hi, everyone, my name is Azzi Momenghalibaf. On-- on behalf of the Open Society Foundations' public health program I want to welcome you all and thank you for coming to the launch of Mariana Mazzucato's new book *The Value of Everything: Making and Taking in the Global Economy.* (APPLAUSE) Yes. We are delighted and honored to host this event and are also proud supporters of Mariana's work on health and pharmaceutical innovation at the Institute on Innovation and Public Purpose at University College London where she is working to push ideas to rethink the current profit-driven system of pharmaceutical innovation into a system that is driven to meet health needs and serve the public interest.

Lots more to say on that topic. But fortunately she has written a lot about that in her previous book, *The Entrepreneurial State*, and in her new book. I'd like to now introduce and hand it over to our esteemed moderator Jeffrey Madrick. Jeff Madrick is the author of eight books including *A Case for Big Government* which won a Pen America award. And he's also the author of *The End of Affluence, Age of Greed and Seven Bad Ideas: How Mainstream Economists Have Damaged the World*.

He is the director of the Bernard Schwartz Rediscovering Government Initiative and is a former *New York Times* economics-- economics columnist. Jeff is also a regulator contributor to the New York Review of Books. Over to you, Jeff. And thank you for being here.

JEFF MADRICK:

My plea—
(BREAK)

Thank you, all. I trust you can hear me. I can't tell you how delighted I am to be here talking to Mariana. My long interest has been the neglect of government in America. I consider it the biggest economic problem we have. And-- when I saw she wrote this book on the entrepreneurial state I eagerly got it.

And I asked Bob Silvers, (COUGH) the editor of the New York Review of Books to let me review it. He doesn't-- well, I don't ask him that often. It used to be the other way around. (LAUGHTER) I-- when I read it, I-- I-- I have to tell you how I was-- how impressed I was by the depth of the empirical work, by the courage-- and forthrightness of her statement of the case a-- the case being that government was critical to me-- to technologic innovation in America.

And the mainstream economics point of view that it was entrepreneurialism, venture capitalism and so forth was exaggerated and misleading. Wasn't wrong but highly exaggerated. Mariana has fought that mainstream view directly and successfully with that book.

And now I just finished reading-- her new book. And it is equally forthright and brave and well-written. Value-- how to determine value is always the center of modern economics. What I mean by modern economics is going back to the 1600s. What causes value in an economy? And we went through various evolutionary stages of that. Land, production and finally the price system. The price system has been so accepted by mainstream economics on the left and the right that people don't even talk about value anymore. That wasn't gonna stop Mariana.

And thank goodness it did (LAUGHTER) because by talking about how value is created and how misguided some economic myths are she puts-- she puts our current problems in a light that is extremely elucidating and leads to a path that might help us correct some of these. I'm not gonna say anymore. We're gonna have time to chat afterwards. I should tell you a little bit about-- a little bit about the details of her life. Where did-- where were you when you did *The Entrepreneurial State*? Which university, Leads or--

MARIANA MAZZUCATO:

At Sussex. Uni—

(OVERTALK)

JEFF MADRICK:

Sussex.

MARIANA MAZZUCATO:

University of Sussex. (LAUGHTER)

JEFF MADRICK:

She now-- she now has a chart (?)--

MARIANA MAZZUCATO:

Which, by the way, if I put it into my computer I can't because we have this child protection thing. And because it's Sus-sex (LAUGHTER) so we have to-- take out all the barriers and now I can put University of Sussex. (LAUGHTER)

JEFF MADRICK:

So now that we warmed you up-- (LAUGHTER) she now has a (COUGH) (UNINTEL)-- at University College London which shows you that sometimes it actually pays to write economics books. And-- she started an Insti-- called the-- Institute called Institute for Innovation and Public Purpose.

She's won a bunch of awards. Quite prestigious awards, in fact. She works for many policy makers and many public institutions. I don't know when she has time because she claims to have four children (LAUGHTER) and an Ita-- and an Italian husband, no less. (LAUGHTER) So Mariana, it's-- it's great to see you here. Why don't we get underway?

MARIANA MAZZUCATO:

Thanks.

JEFF MADRICK:

You were gonna start us off, right?

MARIANA MAZZUCATO:

So the crazy thing is not that I have four kids but I had them in five years. So I'm not just-- productive-- reproductive. Too much. So if anyone's interested I'm happy to sell at least two of them (LAUGHTER) for the price of one. I'm sure that's not a good thing to say.

So first of all, thank you so much-- Jeff, for-- you know, being-- happy and willing to chair the evening and to Azzi. I'm not sure where she's gone for-- welcoming us here to have the launch at the OSF which, as she said, has been really critical also in financing-- some of the more practical work that we're doing with my colleagues on rethinking value-- in the health care sector. And why is it we've all sort of not so much accepted but been conned, I should say, around these issues around value like value-based pricing? And maybe we'll get to that later.

I should say that the reason I wrote the book-- was because even though *The Entrepreneurial State*, the book that Jeff mentioned, you know, had quite a bit of-- should say success-- around the world, so it was translated in all sorts of languages and policy makers and all the different, you know, five continents asked me to go to speak them about this whole idea about the state, it's not just a lender of last resort but an investor, of first resort, in the history of technological change.

Whether it was IT, pharmaceuticals, nanotech, internet and, of course, the future which we all hope will be a big, green revolution. Then the actual policies that they implemented when they said that they believed the work were still quite problematic. So the nitty gritty tools, the instruments, the levers they had in their hand, you know, have to be designed.

And the way they were designing them continued to be problematic. And when I, you know, tried to understand, "But hold on, you said you read the book. (LAUGH) How can you then do this R&D tax credit in such a kind of foolish way?" I understood that the problem was that the way that they were being lobbied by different types of stories-- and there's really no other word for it. These are just stories, right? Economics is a social science. It's not nuclear physics-- was always through different types of stories and narrative and discourses about value. Right?

So I'm a value creator or you want value creation in this or that sector and, hence, you know, I need a capital gains tax reduction or an R&D tax credit or the famous patent box. I don't know if you guys know what the patent box is. But it's probably one of the most dysfunctional policies that have come out in recent years.

You must know that patents are monopolies for 20 years. You actually get-- you know, monopoly profits for 20 years if you're a company that has a patent. That's supposed to incentivize innovation. So there's no reason for the policy maker on top of that to reduce the tax on the profits that are generated from that patent. Right? You've already got monopoly profits for that amount of time.

And yet the way that that particular tax credit or tax cut has been implemented across the world is now also being implemented in the U.S. was through the narratives, again, about if you want value creation and wealth creation in the pharmaceutical industry or in energy you will need to bring in this-- policy. And so I thought, "Okay, maybe I should start kind of one step back." Instead of talking about innovation and all the great potentials for the green revolution and why we have to learn the lessons from Silicon Valley where, you know, the state basically invested in everything that makes your smartphones smart and not stupid. You know, here's my dumb phone.

So the internet, GPS, Siri, touchscreen, Google's algorithm, even fracking. So even the bad stuff is actually financed also by government. Right? This isn't so much a normative point. It was about transformation-- that I should sort of step one step backwards and just talk about value. Right?

Because the stories about value and wealth seem to be really strong. And, in fact, continuing to drive so many of these dysfunctional policies that I was seeing in both the financial sector which we know is, you know, quite explicitly dysfunctional but also in those parts of the economy that we continue to think are kind of driving-- wealth and-- and growth. So the ones that are actually in the real economy making things.

And so what I did in the book-- at first I was a bit scared to do it 'cause you know that with Kindle you can tell what percentage of the book people have read and Piketty's amazing book which is so detailed and so thought out and, you know, both theoretical and empirical apparently only about 6%, right, (LAUGHTER) people got through?

So I should've learned from that and not spent three whole chapters going through the history of economic thought for the last 400 years. So I'll be curious to know from public affairs if you can find out if I get over that 6% threshold. And so what I tried to do is actually kind of different things. The first was to bring value and the debates about value back to the heart of economics. 'Cause in some ways I feel that value used to be, right, I th-- I belie-- it-- it is-- value used to be really at the heart of the way that different economists actually kind of fought for their territory. And also then advised policy makers.

And it's actually left economics departments and gone to business schools. So the word value isn't even used really in economics. We just kinda learn econ 101 and the production function and the end there's this assumption that value is created.

But because there's one theory of value that's taught they don't even have to call it value 'cause it's just economics, right? Whereas in business schools, just think of all the words you might hear, shareholder, values, you know, you're maximum shareholder value, value, change, shared value-- again, value-based pricing that I mentioned before. And so what I believe has happened is since economists actually hold a huge amount of power, right, remember Keynes' famous quote, he said that, "Practitioners on the ground who think they're just doing things and don't-- don't care about theory, they're actually slaves of defunct economic theory."

If the economists are no longer actually debating about value, it's just kind of assumed and hence not even teaching different theories of value, just one, then that word is no longer contested. Right? It's no longer really debated. So it becomes quite easy for potentially things like value extraction activities which the book kind of lays out all sorts of different types which I'm sure we'll talk about.

Value extraction ends up passing for value creation because what's value? Right? Value's kind of in the eyes of the beholder. Prices. That determines value. And so then what happens is things like rents pass for profits. And I'm not talking about rents in terms of the rent you pay for housing. Rent in the sense of how the classical eto-- economists talked about rent.

And by classical economists I mean Adam Smith, David Ricardo, Karl Marx. By rent they meant unearned income, when you're just kind of moving around existing assets and somehow charging prices for it versus the creation of new, high-quality goods and services in the economy.

And so by going through this history of sort of value theory, just-- first wanna just to give a sense of there's different ways to think about this. And the second thing is that the big revolution in economic thought was actually that the way that the-- the theories of value evolved was really from being tied to objective conditions of production. And I'll say something more about that in a minute to subjective theories. So, again, value in the eye of the beholder. Right? And what I mean by that is that if you look at the last, again, 300 years or 400 years-- the way that economists thought about value was often tied also to the kinda era that they were living in.

So the mercantilists in the 1600s, they really believed that value was tied to trade. So they focused on the navigation acts of 1651, they focused on the terms of trade and exchange rates. This should start ringing a bell. It's basically Trump. He's brought us back-- 400 years. Or he focuses (LAUGHTER) oh we gotta get the exchange rate right, we gotta get the terms of trade right, we better build some walls so this, you know-- a type of exchange happens instead of the other ones so we don't get screwed in the process.

But really what happened then was very interesting which was in the agricultural revolution. So in the 1700s the physiocrats were really the first economists. They were French—Quesnay and Turgot. And it's quite interesting. By the way, I had prepared, like, 50 beautiful slides for you.

But when they showed me how the room was laid out I thought you'd get what I currently have which is a trapped nerve 'cause you'd constantly be like that. So I had this wonderful-- tableau economique of-- of Quesnay. He basically showed-- it looks like the first Excel sheet ever.

They were very interested in farm labor which they believed because, you know, 1700s agricultural society-- they believed that that was the heart of economic value. And they were very interested in reproduction of the system. So were very concerned about the fruits of farm labor also being reinvested back into the economy and not being siphoned off into value extraction and fighting wars or dressing the kings and queens with luxurious kind of dresses. Right? So farm labor was really the heart of their economic theory of value. (COUGH) And then you had the ones that I just mentioned.

The classical economists though, Adam Smith, David Ricardo, Karl Marx living through the industrial revolution and it's not surprising they placed labor. Right? Industrial labor at the heart of their theory. And you really, you know, people think of Marx when they think of the labor theory of value.

But Smith was all about understanding how changes in production, changes in the division of labor, the effects of innovation, what effect that would have on productivity, on growth. He actually understood things like absolute advantage, not comparative advantage. I'm speaking to the few economists here in the room. So ignore that. But for him and also for Marx, also the issue of distribution, who got what, profits, wages, rents, was very much tied to the understanding of production and innovation. So even David Ricardo, writing back in 1821 in the principles of political economy, he had this great chapter 31, called *On Machinery.*

And he said, "Uh-oh, we're in trouble." And he basically said what everyone's talking about today, these robots, called mechanization and, you know, machinery in his days, are taking jobs. They're lowering wages. You know-- and-- and what's actually quite curious is what then happened actually for 200 years is that even though they were taking jobs it didn't matter because profits were being reinvested in different parts of the economy. So jobs appeared elsewhere. But we'll get back to that.

Anyway, so this focus on innovation, technological change, division of labors is objective. It's actually tied to real things on the ground, right, that you can study in different ways. You might have different theories about it. But it's tied to the real conditions of production, distribution, technological change. And so the big revolution was what came later which is what we have today.

Neoclassic economic theory which-- why do I call it a revolution? 'Cause it made the logic go the other way. Instead of having a theory of value, whether it was based on farm labor or industrial labor and industrial production and innovation determining, say, prices and exchange, the focus became one where prices became the focus. And the prices themselves through market supply and demand meeting revealed value. Right?

So instead of theory of value determines theory of price we have a theory of price which determines what we value. So this is why in GDP which is our measure, right, of how to see whether countries are doing well or not and you have politicians worrying about whether they're growing or not and by how much, the 1%, 1.2%, 1.3%, 1.35% and, you know, the, you know, countries go down if they're not growing enough over-- over three quarters 'cause that's called a recession-- actually only includes mainly things that we can price. Right?

So this is why you have these funny things happening where if you marry your cleaner GDP will go down. Right? Because something that you're paying for, there's a price for it, all of a sudden, maybe you marry the person, man or woman, and they're doing the same job but you're not paying for it, GDP will go down.

Or if you have pollution GDP will go up because the pollution itself doesn't make GDP go down because there's no price for it unless we, you know, implement things like carbon taxes. And that's why we do that. But the fact you have to clean up the pollution, there's a price for it. It makes GDP go up. Now these are problems that both feminists and environmental economists have actually written about quite a bit. So you don't need me to write this difficult, complex book to get that. What I wanted to say is, you know, you have even a bigger problem.

So much of what's in GDP because we don't actually have this debate anymore about what's valuable, what's not, what's productive, where's the productive forces in the economy, what are the more unproductive forces, how can we steer-- the economy towards-- productive--capitalism versus predatory, unproductive capital-- capitalism-- then you end up actually having a much bigger problem which is that rents get confused with profits.

And so then what I did for the rest of the book was actually kinda show how this happens, how it reveals itself as a problem in the financial sector, in the pharmaceutical industry, again, very much-- working on the-- research that the OSF is also financed-- in the Uber economy and platform capitalism but also in government. When government doesn't feel valued. We actually-- let me just start with the government bit 'cause Jeff mentioned it. And maybe in the discussion we can go more to the other areas. 'Cause I should shut up at some point-- otherwise we won't have the discussion.

Let me just say about government 'cause it's so interesting. Right? Believe it or not, the word public value doesn't really exist in economics. So I live in the U.K. where the BBC, which you must know 'cause you, I'm sure, in hotels sometimes late at night you turn on and you look for the good news and there's BBC world news or you mighta seen *Blue Planet* which is an-- amazing documentary-- on the oceans and-- and the animals that live there, produced by the BBC.

The BBC has a huge debate within it on what is public value. How to understand their own relationship basically with economic growth. But-- but they don't talk about economic growth, they talk about value creation. But that's this debate that they're having. But in economic theory, we don't really talk about public value. We talk about, yes, of course, the state matters. But it's only there to fix problems when they arise.

So the private sector creates value. And at best what the state does is come in when problems arise. They fix market failure. So if there's not enough investment, for example, in science then the state must come in and fix that public good problem and invest in science. Or if there-- if firms are polluting too much and creating negative externalities then the state must come in and fix the negative externalize problem and, you know, create some-- carbon tax. Or if cute little SMEs aren't getting enough financing due to asymmetric information which I won't bore you with what that means, it just sounds fancy, believe me, then they must come in and-- and fix that problem too. Or even worse if you have the business cycle problem, right, which is a coordination failure-- these are all different types of market failures. So too much investment in the boom, too little in the bust, the state must come in and-- and fix that. Right?

So the state is always a fixer, a mender. At best an enabler, a derisker, a facilitator. But who are you facilitating? The cool guys and girls in business. Right? They create value and you're just tinkering along the edges. So it's really no surprise that after the financial crisis-- and this is the-- the anniversary of the financial crisis this week we're still in the same mess we were before.

'Cause any sort of policy levers that we could have had we're just kinda cheerleading along the edges. Oh we gotta fix that problem. And, in fact, we didn't really fix the problem. We're still rewarding within the financial sector short-term investments and not long-term ones. We didn't actually implement properly what could've been, you know, serious global financial transaction tax that would've, in fact, penalized these short-term trades.

We didn't increase capital gains tax which is, in fact, a tax on these short-term trades. We didn't think about, hey, we actually need patient long-term finance in order to help those companies that want to invest in the long run, whether it be the green stuff or the really interesting health-related stuff.

There's very few countries that actually have that patient, long-term finance. Even the venture capital sector is very short-termist. They want returns in three, maximum five years. Right? And the real economy itself is ultra-financialized in terms of, you know, not reinvesting its profits back into the real economy. We have record-level hoarding. So inert capital-- private-- firms in the U.S. There's something, like, over $2 trillion just being hoarded, not being spent and stashed away in different places. But on top of that there's something, like, $3 trillion just in the last decade in the Fortune 500 companies that have been spent on just buying back shares which boost stock prices, stock options, surprise, surprise, executive pay. The whole 1%, 99%.

That hasn't changed. That's even getting worse. So Apple, under Steve Jobs, no share buybacks, under Tim Cook, this is the big plan. So, again, when you look at that, it's not just a question that we don't have the right theory of what policy is. But it's not surprising if you don't have a theory of public value why should government, for example, even invest in its own capability and capacity and knowledge creation process to cocreate value alongside business? And the top managers, of course, in the world do go to business schools where they can learn these really cool things like strategic management, decision sciences, organizational behavior.

If you're just-- a facilitator of the creators of value, if you're a derisker of the cool risk takers, you don't need those skills. So you end up getting this self-fulfilling prophecy where government actually becomes less and less able. Doesn't actually have the tools nor the ambition because you also have a whole theory which I go through in the book, I can't remember what chapter, public choice theory, which has actually convinced, believe it or not, civil servants, so people who work in the public sector, that government failure is even worse than market failure.

So don't be ambitious 'cause if you are ambitious you're probably gonna screw up. So just literally just, you know, stand back, do the basics, infrastructure, roads, housing, skills then get the hell outta the way for the cool stuff to be done by industry.

And this, of course, ignores all the history which, again, I talked about in the other book where actually lots of these investments were taken on by governments. But also it creates really problematic contracts. So contracts which, you know, just like in the financial sector we know risks were socialized but-- the returns then get privatized.

The same thing actually happens in industry. So the usual example I give is Tesla and Solyndra. And then I-- I will really be quiet 'cause I'm sure the question and answer bit will go more into the financial-- sector. And because we're at OSF hopefully we'll have lots of questions around health.

But-- what was really striking to me was more recently after the financial crisis when Obama, first of all, had a stimulus program. We kinda forgot about that in Europe. You know, $800 billion was not bad. Probably not enough but it was still hefty. And he thought, "Okay, I'm gonna direct this into ambitious things." So he wanted to have a green direction. There's actually a great book called *The Green New Deal*. I can't remember the author-- Grunwald. And-- and he set up ARPA-E as a sister organization of DARPA, right, but in the energy sector. And he started to think about the portfolio of different types of investments that would be required to do in green what happened in IT.

So he had a portfolio of different types of investments. And you probably know one of them which was Solyndra. How many people know about Solyndra? (COUGH) And why do you know about it? 'Cause it went bust, right? You know about it 'cause it went bust. So the taxpayer went, damn, you know, $500 million. We gotta pay the bill. Government stop, you know, just do the basics. Fund the basic research but don't make bets, right? Same amount of money went to Tesla. How many people know about Tesla? Lots. But do you know that government funded the same amount of money in Tesla? Probably not.

And so the question is if you actually had this notion of government as a cocreator of value, right, then not only the skills necessary to do that to think big, to even know how, you know, to think about kind of public purpose and missions like the Kennedy moon shots in-- space, the equivalent in energy and health, that's been diminished.

But also literally if you're gonna be an investor of first resort just ask any venture capitalist, they know that for every success you will have some-- inevitable losses. Instead, what Obama was told by the Goldman Sachs guys working in his government was the exact opposite of what the Goldman Sachs guys do. He said, "If you don't pay back the loan to Tesla we get three million shares in your company. It was like, "Why would you want three million shares in a bad company?" Right?

So the t-- the loan was taken out in 2009. Paid back in 2013 'cause Tesla did pay back the loan unlike Solyndra that went bust. Price per share went from nine to 90. Multiply that by three million. Had he taken out, you know, the shares based on the success, not on the failure, as a government just has to get involved to, you know, to-- pick up the mess that would've more than been enough to-- you know, cover the Solyndra loss and the next round of investment.

But to have that boldness and that confidence you need to really believe that you are also cocreator of value. And so we have this, again, self-fulfilling prophecy where today also many of these public institutions-- which have been critical to American success are not only being unfunded or defunded, right, 25% cuts in all sorts of different agencies like the NIH, but what government is even allowed to do, think boldly around some of these-- you know, public value and public sector missions has been reduced because you're just there to tinker.

And that, again, becomes a self-fulfilling prophecy. You do kinda become irrelevant. And so the next step is to maybe outsource or privatize which we can all argue is-- is-- is a problem and we'd like not to see that. But if you are destroying, in the meantime, the structural composition of the public sector-- 'cause we haven't understood its role in cocreating value then that's almost the inevitable-- consequence.

And so by bringing value back at the heart of economic reasoning I wanted to sort of challenge these perceptions about where value comes from. And especially go back to a more kind of rigorous discussion about production and technological change and understanding the different actors along that-- process. Sorry. I could go on so I will shut up now.

JEFF MADRICK:

Let me-- (LAUGHTER) let me-- (APPLAUSE) did I get this on?

VOICES:

Yeah.

JEFF MADRICK:

What I wanna talk about a little bit however be-- that is the heart of my interest, what you just discussed-- but to get back a little bit because I think people might get confused, why is the s-- use of price as the measure of value leading to these problems?

In other words, it looks like finance creates a lot-- repeating what you talk about-- it looks like finance creates a lotta of value because when you price it it's a huge-- part of GDP now. It wasn't even included in GDP many years ago. But you're saying it's not, in fact, in many ways it's an extractor of value. So getting back to-- to the price as the s-- the causal factor of this misunderstanding and on our il-- and our inability to understand that government actually creates value. Could you explain a little of that?

MARIANA MAZZUCATO:

Sure. So I actually open up the book with the incredible quote by-- Blankfein who is a CEO of-- Goldman Sachs who in-- sorry, how-- how do you pronounce it? Blankfein.

JEFF MADRICK:

Yeah.

MARIANA MAZZUCATO:

I'm sorry. Who, in 2009, so one year after Lehman-- with a straight face-- he wasn't joking said, "Goldman Sachs brokers are the most productive in the world." Right? So you think people are like, "Ah," (LAUGHTER) no. He got away with it because, in fact, how we measure productivity is through the price system.

So they are being paid a huge amount. (LAUGH) Right? So if price is revealing value, he's absolutely right. And for the same reason because the way that government enters GDP is through simply its costs. So the salaries of teachers enter GDP in terms of government expenditures. But the actual value that the teachers in the education system are producing doesn't have a price, especially in the public education system.

So we kind of just fudge that and just assume that somehow through the costs of that good we can measure, right, its value. So it's almost impossible to show government as productive. But just coming back to finance, that's one thing which is basically a tautology-- because price is value, then you must be valuable if you have a high price. Right?

But what is value? Your price. But what is, you know, I mean, it-- it just becomes circular. But you alluded to something that I talk about in the book and I go through the history of it which is up until the '70s this was all kind of just fuzzy. Right? I mean, we didn't actually-- and many of my economists friends don’t even know this-- most of the financial sector was not even included in GDP. Because it was actually kind of tacitly assumed just to be kind of-- a transfer of existing assets, what the classical economists called rent. Right?

So in the same way that we don't include social security payments which are just moving money around that already exists, not creating something new, they weren't including things like net interest payments. The difference between what banks are charging in interest and what they're earning in interest. Right? So that income wasn't being included in GDP. It was just seen as moving existing money around whereas, for example, the fee that a mortgage provider would-- offer you, that service, right, because we do national income and product accounting with goods and services that are priced. We include that in GDP. The service that a mortgage provider was giving you which was helping you find a mortgage, there's a fee to that. So that went into GDP. Right? So that was easy. There was a price to it.

But this-- this huge thing which was basically the rise of the financial sector and if you-- in one of my 50 beautiful slides, you would've seen it, sorry-- you really see the-- the rise of financial intermediation. So the different types of-- of-- parts of the financial sector completely outpacing the rest of the real economy.

And Andy Haldane, by the way, at the Bank of England has-- has shown this very well. And that's one face of financialization, right, finance rising and completely outpacing the rest of the economy 'cause it's financing itself. It's not really financing anything in the economy.

But people who were doing the Standard National Accounting, the SNA, was actually group house in UN were like, "Uh-oh, big problem, this thing--" they didn't call it a monster-- but like, "This thing is growing and we're not even counting it in GDP. Oh, well, let's give it a name. I mean, it must be productive, right, because it's growing. Look at also the profits that are being earned."

So they were put into this awkward position that they actually had to almost do the reverse logic. It's growing, the profit's being earned-- and I would call them rents-- within-- this thing called finance-- are growing. So they must be (DINGING) valuable. What is it providing? They came up with some terms.

So commercial banks were providing financial intermediation and financial services. And investment banks were providing risk taking-- services. And of course we all know what happened. Right? They took ma-- massive risks and we all took the real risk in terms of bailing it out. And-- and so it was kind of, I mean, this shows where the problem becomes. Right? If you don't actually have an understanding of where value's coming from you do that kind of reverse logic.

Now, I wouldn't then do what Adam Smith did. And, again, one of the funny quotes I have in the slides is Smith coming up with the list of who he thinks are productive members of society. Let me actually just read it to you. 'Cause all of you are unproductive probably. (LAUGHTER) It's actually very funny. Let me put my glasses on 'cause I turned 50 recently. Okay. There we go.

He says-- he's talking about unproductive labor. And he says, "In the same class of these unproductive people-- must be ranked some-- some both of the greatest and most important and some of the most frivolous-- professions. Churchmen," any priests? "Lawyers," (LAUGHTER) come on, I'm sure room must be half full of lawyers. "Physicians," so doctors. "Men of letters of all kinds," that's us, professors. Right? "Clayers, buffoons, musicians," and get this, "Opera singers and opera dancers." (LAUGHTER)

I mean, of this whole list there's two of them, I mean, he must have hated the opera. (LAUGHTER) Yeah, I-- I actually would love to know what he had just seen when he wrote this. Anyway, so this is, like, really static. Right? It's, like, these guys are unproductive and then you have all this, like, you know, industrial labor's productive.

Now what I think one of the lessons at least that I hope that the b-- in-- in the book is not to do that. You know, it's not, like, hedge funds, derivatives, credit default swaps, finance, blah. And then, you know, all this stuff is good. No. And-- and in fact, the reason I forced the-- the two publishers to change the subtitle it used to be *Makers Versus Takers in the Global Economy*. I said, "No, no, no, that's too static. That comes to this, like, list of the buffoons versus the cool guys."

Making and taking, the verb, the more active, strategic kind of element to it means we can change things. We can change finance. We can put finance into what-- the economists call kind of the production boundary. We can make it more productive. It doesn't have to be based on rent. And this is what I talked about in the beginning is the failed experiment.

We could have used the financial crisis as a major wakeup call to seriously reform finance, to actually allow it to be a more productive element of-- society, what Minsky called the capital development of the economy versus allowing it to do what it continues to do which is finance different parts of itself which, by the way, has led to something extremely problematic. I'm sure you all know that the financial crisis was caused by private debt, not public debt. Even though what happened after was all that austerity. But currently, in both the U.K. and in the U.S. we have the same level of private debt-- which, again, caused the crisis that we had just before the crisis-- popped.

Right? So in the U.K. especially the level of private debt to disposable income is at record levels. And it's not a surprise, right, 'cause people's real incomes haven't been increasing. There's-- there's all sorts of studies that have shown this. And so even just to retain your existing living standards you have to take out debt.

In fact, in the U.K. they fueled that. They helped people buy houses, help to buy schemes. Why should you buy a house if your income (LAUGH) isn't rising? You're gonna find yourself with loads of debt. Right? So there's all sorts of different things that policy makers could've done. So they fueled the rise of debt which, of course, again, rewards the financial sector which is providing that debt.

And so this is the issue, that when you-- when price is value it-- it creates this t-- A) a tautology in terms of who we value. We value Goldman Sachs, we don't value government. But it also creates a self-fulfilling prophecy. So, you know, w-- which is basically what I was saying before with government. But also the financial sector itself became more and more bold, more and more confident. And that's why with such a straight face it could, you know, even after the crisis-- make that claim. And then the complete failure of policy to do anything about it.

JEFF MADRICK:

I-- I-- I wanna get back-- I think it will be interesting to the audience-- to be as clear as possible about how this-- what-- I think what you're saying is most of these financial assets is-- were mispriced. They were the wrong price. The-- the mainstream economics profession insisted by and large that can't be the case.

'Cause we got, you know, we got all kinds of theory about-- about how stocks were properly priced for the long run, how all, you know, financial instruments are always properly priced. That gets back to for me the heart of your argument which is h-- economics change because of the-- mainstream economists began to argue that the price was always right.

In fact, we had a TV show about that. (LAUGHTER) But-- no, he's the only guy who knows this reference. (LAUGHTER) So what-- how-- government, of course, doesn't have that advantage. We don't have the prices you repeated-- stated. There is no price on the value created by government. We have to start thinking in these terms. How does finance extract value then? You mentioned briefly in passing. But I think it's important for people to realize that gover-- that your argument is finance didn't add value. It looked like it did because of the price mechanism. It actually extracted value which very few even left-wing economists were able to explain. They explain that there was always speculation but it wasn't-- but they never got to that key point of extracting value from the economy. And I think that's critical. I-- critical example of--

MARIANA MAZZUCATO:

Yes.

JEFF MADRICK:

--many that you gave.

MARIANA MAZZUCATO:

It's a critical example. But to be honest, one that's been overly analyzed. And I think the second side of financialization that I mentioned before which was actually happened to industry when it became financialized is much less understood.

So the first one, which you were talking about was, you know, if-- if you actually have a financial sector which is built on creating different types of products like derivatives which are basically, you know-- putting different types of risk together but slicing it up so much that no one even knows what they're looking at, the only way to actually think that you know what the value is-- is through the price 'cause you're not actually, I mean, there-- there's a huge issue of also transparency and secrecy, to be honest, in the financial sector in terms of the degree to which risk was spliced.
But-- but that has been analyzed. That has been, in some ways, you know, told also through great movies from the inside-- what was it called, The Inside Story-- Inside Job-- to other ones. The other side which I think is-- is much more still a problem because people don't get

it is this issue of financialization of-- of sectors in the real economy. And pharmaceuticals and energy are the worst. Okay? And this is the problem where when short-term returns which were driving the financial sector also become the way that industry is run, you know, what's happening.

And the theory of value driving that is very interesting. So this notion that you have to maximize shareholder value in order to create growth comes from a particular theory that was basically pushed out through business schools worldwide by people like Michael Jenson which were based on a particular notion also of risk taking.

So, you know, we all know or think we know that, you know, capitalism is different from feudalism Why? Because of innovation. There's lots of change. You know, Marx talked about this, feudalism was 500 years of inertia. Not much happened. Capitalism, all this change. And hence you need risk taking, you know, you have to be willing to kind of take risks to make that happen. And so it's quite curious that the theory of shareholder value actually was a theory also of risk taking.

They argued that the reason why it's good to maximize shareholder value is that shareholders are the biggest risk takers. And we know you need to take risk in order to create value. They are, what's called, the residual claimants. So the idea is that everyone else in the economy, everyone in this room, unless you're a big-- shareholder-- so banks-- sorry, everyone else in the economy has a guaranteed rate of return.

So workers get their salaries. Banks get their interest rates. Governments, you know, do what they need to do, don't take big risks. And if there's anything then left over after production occurs and everyone's gotten their guaranteed rate of return, if there's a residual, right, the residual is the extra that's left over at the end, that's what the shareholder gets.

And so this idea that actually the shareholder is risking getting nothing, right, they're residual claimants, also is this notion that they also, hence, the biggest risk taker. So when you do have the biotech boom, the nanotech boom, the internet boom and what's becoming now the clean tech boom when there's something left over they actually deserve to get the booty at the end.

And the share buybacks are also a way to do that. Right? But that's based on a particular notion of who the value creators are. Right? Somehow business, sorry-- government is being portrayed as, you know, they are just, again, fixing things. But workers are getting their salaries-- you know, the different elements of-- of-- of production are kind of getting what they, you know, set out in their contracts.

But the real risk takers are the shareholders. So, you know, having-- gone through the history, again, of many of these technological revolutions in *The Entrepreneurial State* where for every internet that was publicly financed you had huge amounts of failures as well, that's completely false. Right? This notion that government had some sort of guaranteed rate of return or has a guaranteed rate of return is false.

But what's interesting-- the reason I'm kind of spending a bit of time on this is that here too you don't have a lack of critics of short-termism. Right? Even-- even-- what's his name of-- BlackRocks had-- Fink-- Larry Fink wrote a whole letter to businesses worldwide saying, "You have to refind your social purpose. There's too much short-termism."

But we won't get rid of that. We won't get long-termism until we've revealed that much of the short-termism and speculation in industry is actually based on a problematic way in which we have framed who the risk takers are and who the value creators are. And so it's only by debunking these underlying assumptions about value that we can also then create real sort of reform of the system. Right? So it's not enough to just say, "Oh speciation is bad, short-termism is bad," until you say, "The theory of shareholder maximization--" it's not just that shareholder maximization leads to these problematic outcomes. It's based on unfounded assumptions like the one I just mentioned, right, that, you know, workers and government are kinda, there, important but not really, you know, big, active engines of capitalist growth.

And-- and this, you know, by kind of going back to value as being the center of the way in which these things happen and the way that it's so easy then to capture the story about where value creation and wealth creation happen to then earn these-- very above-average returns-- is-- is what the book's trying to debunk. So, you know, going to the kind of essentials of the narratives of value.

JEFF MADRICK:

So let's-- let's quickly because-- let's-- just-- I'm gonna ask one more question and then open it up to the floor 'cause I know you have many questions. Solutions. (LAUGHTER) Quickly. A few key solutions.

MARIANA MAZZUCATO:

So, by the way, I have this unpublished chapter which was the conclusion which had-- like, a list of so many different solutions. And then I thought, "No, no, no, hold on." But then I should've actually interspersed them in all the different chapters.

Each chapter should've ended with solutions. And I kind of regret that I c-- you know, did a conclusion chapter which was much more inspirational with a touch of different solutions. But the reason I did that was 'cause I felt that-- the point was really to reframe things and then to give a touch of the different solutions-- which I-- I think, as-- as we were talking about before this event-- it-- are-- are there. But there's so many different things that can be done by repositioning, for example, the policy maker. Not just as fixing a market failure but as an active cocreator.

And if you look, you know, for each chapter, right, so just take finance, the obvious things there are implementing things like different, you know, like public banks. Public banks which, you know, even in countries where they exist, like in Italy we have Cassa Depositi e

Prestiti. Don't I sound Italian? I am an Italian. (LAUGHTER) CDP. But it-- it's actually not a very ambitious public bank.

It basically just hands out money to dying sectors to sorta prop them up. In Germany they have the KFW which is a public bank which is very active-- public bank which provides patient long-term finance to solve societal problems. Right? So they have the enidgevenda (PH) mission in Germany which has been set out to really transform Germany in a green direction. And that bank is providing that strategic long-term finance to any type of organization that is willing to transform itself in order to reduce the-- the carbon emissions of the country.

So even steel which in many countries is quite inertial including in this country, as coal is, in Germany steel industry didn't get money because it's steel. But because it was willing to transform itself, in fact, it's massively lowered its material content. But that patient, long-term finance is something that, for example, in this country doesn't exist. And so, again, reforming finance, turning it to become more productive as opposed to its unproductive-- rent seeking-- self.

The other thing is limiting share buybacks. There actually used to be limited. The degr-- and Bill Lazonick has written quite a bit of this of what actually happened in terms of the Security and Exchange Commission in some ways getting captured. There's no reason we shouldn't limit share buybacks. In fact, for those companies-- and there's many of them in all sectors that are receiving so much different type of government support and, again, that's what my previous book was about sh-- just showing that support.

But in this book I argue that there should be a contract. If you're actually getting these government investments then the return for that investment is not necessarily just the kind of equity example I gave before but a return could be asking companies if you want this kind of investment, you know, from the public sector, whether it's in energy and pharma, you have to reinvest your profits.

That, by the way, is what got us Bell Labs. Bell Labs was a investment by AT&T, one of the most innovative-- innovation labs ever. And it was forced into existence by government in order for AT&T to retain its monopoly-- in the Telecom sector which was not God given but government-- granted. They have to reinvest their profits back into the economy.

So not hoard it. And not financialized into innovation. Big innovation beyond Telecoms. There's all sorts of ways, again, in terms of the contracts that we actually have. The outsourcing that goes on which is enormous-- that itself might be seen as a problem. But it's really much more the characteristics of it.

So when government is, you know, giving out-- contracts to the private sector there should be really strict conditions in terms of what needs to be given back. Right? 'Cause government isn't there just to facilitate you but cocreating new spaces. So-- in-- in England, for example, we have privatized rail and allowed people like Richard Branson to come in into the rail industry but with no strong conditions attached in terms of what should've happened to rail in terms of investment in-- you know, making sure that the rail was modern, green and fast. Right?

So we have actually a crumbling rail system because the contracts were given out to the value creators. Prices in the pharmaceutical industry are incredibly problematic because, again, as I say, they are not reflecting the value that was collectively created by the different actors in the system which are not just the state. I already mentioned the NIH, these are incredibly also philanthropies like in the U.K. the Welcome Trust.

The prices should absolutely be reflecting that collective value creation process instead they don't because somehow the, you know, big pharma has completely monopolized the discussion about the wealth creation in the sector. So yes they have to charge these very high prices because they are the ones who are creating value. And fine, later you can have welfare state institutions reducing those prices. That's a very inefficient way to set up a system.

And that's why this report that we're putting out in a couple weeks argues that we should almost think about health like we do in the military (LAUGH) where you wanna win the war, you put in a lotta money to fund the upstream stuff. And the downstream prices for the things you financed, of course, actually reflect-- you know, this contribution that was put in by the DARPA's-- in that sector. And so we call that a mission-driven-- approach to health innovation. But anyway, these are just examples of the-- the completely actually kinda common sense but transformational-- policies that you would have if you really kind of unpick the way that value is thought about in these different sectors.

JEFF MADRICK:

'Kay, thank you. We have about 20 minutes or so. Do we not?

MARIANA MAZZUCATO:

Uh-huh (AFFIRM).

JEFF MADRICK:

I think at least 20 minutes.
(OFF-MIC CONVERSATION)

MARIANA MAZZUCATO:

We can go ten minutes over. Yeah.
(OVERTALK)

MARIANA MAZZUCATO:

So 20 minutes.

JEFF MADRICK:

Okay. So let me-- ask you all to put your hands up. I-- I presume do people go to the mic or is the mic going to them?
(OFF-MIC CONVERSATION)

JEFF MADRICK:

Okay so I have to pick on people. I have to choose. So I'm gonna choose to begin with this young woman over here behind you.

KATYA:

Hello, (UNINTEL) thank you so much for the-- for the talk. I have one question. You've changed my mind around-- the role of government and-- and many other ways. There's one thing that I'm a little bit hung up on which is the concept of the maximizing of shareholder-- shareholder value in that this is-- is a goal.

The question is around how can-- how can I, how can we, unsee the fact that these initial investors, like, that they-- they actually do take a lot of the risk. I think that they do risk getting nothing. And I understand that of course the workers contribute, of course the government can contribute and-- and all of that. But my question is how can I unsee-- that risk that is being taking and the value of that risk?

JEFF MADRICK:

Can you-- just tell us your name when--

KATYA:

My name's Katya.

MARIANA MAZZUCATO:

Hi. (LAUGHTER)
(OFF-MIC CONVERSATION)

JEFF MADRICK:

Can you handle three questions?

MARIANA MAZZUCATO:

Oh yeah. So did you have-- okay.

JOEY SPEVACK:

Yeah-- Joey Spevack (PH). And-- I was at the Bell Labs you were talking about. What I wanna find out is what you think is the probability of any of these marvelous things-- these solutions happening? It seems in our current climate-- close to zero. So I'm just wondering what your thought is.

JEFF MADRICK:

And let me go farther back. There's a young woman on the left.

LIPPY ROY:

Hi, Mariana. Your-- passion expertise for this area is really-- evident, so thank you. My name is Lippy Roy. I'm so not an economist. I'm-- I'm a doctor. And I s-- practice-- addiction medicine. And mostly for the undeserved. So prior to moving to New York I was a doctor to Boston's homeless population among whom the leading cause of death was drug overdose.

And I moved to New York I-- I was the former chief of addiction medicine for New York City jails including R-- Riker's Island. So my question really for you is really the role of big pharma and government and how they really played a role very closely with the current opioid epidemic, as I'm sure you know. Back in 1996 Perdue created OxyContin. And they also funded over 20,000 pain-related educational programs including the American Pain Society which came up with the painism-- vital sign.

And the joint commission which educated people like me in training pr-- medical training programs. But they specifically said that (COUGH) opioids aren't addictive and then they said that-- opioids for chronic pain was evidence-based. Two points were-- that were patently false. But they could not have possibly sold-- billions of dollars' worth of OxyContin if it weren't for the complicit role of the FDA and the DEA in-- in, you know, increasing quotas. So I just wanted to get your sense as an economist on how we can really prevent things like this from happening in-- in the future. Thank you.

JEFF MADRICK:

Thank--

MARIANA MAZZUCATO:

Wow. Okay.

JEFF MADRICK:

--you're on stage (?).

MARIANA MAZZUCATO:

Good. So I will be sort of brief so we can get another set of at least three. So the first one, Katya, was-- I'm being like a politician when they say their name. Katya. (LAUGHTER) Hold a baby. (LAUGHTER) Right. So it's really good question because sometimes because of the passion you mentioned I might be misinterpreted. (LAUGH)

So it's not that shareholders aren't taking risk. That would be foolish of me to say. It's not also that the companies, you know, think of Apple. My God. Of course Steve Jobs and Sir John Ive and all the people still working in-- in Apple are incredibly bright in themselves also as entrepreneurs in the business, not just the financiers taking risks.

You-- you-- the-- the-- the main thing, if you want with the Apple example that I also try to give is that-- that collectively value created process is completely dismissed. So of course the design that Apple implemented around existing technology was hugely important. And this, by the way, is also something that governments have a huge problem in-- capturing which is these intangibles like design and-- and other areas which are less obvious as-- in the quantity of labor, the quality of capital.

Going into production we have a (UNINTEL) in quantifying that. But it was very important. Right? So-- and then also in finance, that early kind of, you know, venture capital that might be going into some industries, of course that's important.

The point is-- and this comes also back to your point of trying to get out of me this more-- specific way in when-- which one could also, in some ways, capture the amount of value extraction is if you do also have, for example, a venture capital sector that does tend to come in-- it's almost precise, to be honest, like, 20 years after (LAUGH) the public sector spends on an area.

So in the biotech sector, venture capital more or less came in in-- at the end of the 1980s, early 1990s. And if you look at lots of the early investments that went into biotech, they began 15 years earlier, right? So VC has never really been a seed investor. That's why you need the famous business angels. But they're basically friends and family which no one has enough of. So that's kind of an exception. Right? So the amount then that VC extracts-- it's not that they're getting something. Of course they should get something. They did something.

But the amount, for example, the 20% one could argue is too much relative to what they actually did. But if the myths and the stories about the role of VC are what-- are allowed to predominate because the actual, you know, concept of value is so fuzzy.

And again, based on price. And of course they do get a very high return. So that's their value. Then it becomes very hard also because the government investments are not priced. Right? That go in early to actually really work out, well, what should the right percentage be? Should it be 10%, 12%? I'm sure the-- I know we have at least two VC people in the room. So they can tell us. But so it's where this disproportion between what was done and how what was done was told. Right? And that would be the same thing with the shareholders.

So what I'm trying to say is of course they took risk. But they're not the residual claimants, the only ones that don't have a guaranteed rate of return. Right? So that-- and that's really important because otherwise we do get into a name bashing thing like Adam Smith. You know, opera singers there, those guys there. You know-- VCs and shareholders there and government there. Of course not. That would be a complete mistake. That would just give us the opposite problem. Right?

And so that's why also I really believe-- and also the Scandinavian model both of corporate governance but also how policy is done in terms of stakeholder governance. Different actors at the table, both in terms of thinking about investments of companies. Right? So if workers in a company in-- in-- Scandinavia are gonna be willing to take on lower wages, that will always be in exchange for investment in their training which will also be-- make them more flexible and adaptable to innovation, for example, in their area. So, you know, these things anyway get negotiated with different value creators at the table. Government, business, trade unions.

Jerry Spevack-- (LAUGH) well, the probability, it depends. First of all, it depends where you were talking about. I've been working a lot with-- countries around the world. And whether it's Singapore, Dubai, something's happening in Chile up until recently in Brazil-- China, I mean, China today is spending $1.7 trillion-- trillion dollars in greening in its economy. A very active kind of entrepreneurial state kind of ways. It's not perfect. Of course there's huge problems in China. It would be foolish to say China's heaven.

But it's really interesting that China's learning actually the lessons of what actually happened in Silicon Valley. I often say in the U.S. they talk Jefferson but act Hamilton. China's actually talking and acting Hamilton. Not necessarily in perfect ways. Right?

This is also really important why democracy matters. You know, the man on moon mission which, you know, again, in some ways Bell Labs was a spillover of all that as many of these-- ambitious programs were-- was determined by kinda one guy, Kennedy, and his team.

That's kind of the old style way of doing things. Missions are increasingly-- increasingly these kind of bold missions which then require different actors to come together to solve something that's, you know, government's determined or sort of interesting and important informed by movements. So that enidgevenda-- (PH) mission in Germany which is really lowering the material content across the board of manufacturing actually came out of the green movement in Germany. They fought for that for 30 or 40 years.

And what's really interesting is when governments are able to, on the one hand, listen, which is hard, you know, the art of empathy-- (LAUGH) my husband used to make documentaries. And he hired actually an anthropologist that would teach his documentary makers how to listen. The academics aren't too good at that and-- and, you know, policy makers aren't either. But listening and harnessing social movements, think of the big movements around care-- but then using, you know, those different voices at the table to then form-- let's just say it, a top-down mission. You know, we are going to achieve this really bold, ambitious goal. But we're gonna do it together, again, using government instruments to welcome bottom-up experimentation, et cetera.

But it is a sort of a top down thing. But you don't determine it as a pet project. It's not, you know-- Trump who wants to be famous for, well, he's mainly doing the wall. But even if he wants to do great infrastructure, that's kind of just infrastructure. Right? And that might just be his pet project. How to really allow this, you know, the direction of innovation-- and we shouldn't forget that innovation has both a rate and a direction.

The direction of innovation to itself be cocreated through also civil society engagement-- that is happening in some countries. Denmark, by the way, today, is the number one provider of high-tech green services to China's green economy. So by having real-- and Saskia (PH), of course, probably knows about this, well, I'm sure you know it 'cause you tell the w-- world how to do this-- but by having a green city strategy it just requires thinking of all the different elements of, you know, I mean, cities have all sorts of problems around sewage and transport. And that requires really thinking through solving a problem. But doing it in an ambitious way which has to do with changing lifestyle.

And, you know, by focusing also on Copenhagen, making it a green city they actually developed the kind of services, not just the manufacturing, around, you know, vestas, green and solar. But the services required for that. So they're actually able to see China as an opportunity to service at the really high end of the value chain. And that has also required patient finance, right, they actually do have-- different policies that are rewarding that sort of long-term finance. Finland has Sitra, an innovation agency, which is absolutely focused on inclusive growth, innovation-led growth and helping different actors together. And Trump, in some ways, is really unique. You probably didn't know that. (LAUGHTER) He is the first U.S. president ever to dismantle many of these institutions.

Raegan increased them. You know, Reagan sort of dismantled the welfare state. But the key driver of competitiveness in the U.S. was many of these institutions and he increased the funding. Whether it was NIH or SBIR he increased the funding.

Trump is the first-- the first thing he did-- it was, like, the first month in office before he did all the other crazy things that we know he did. This was, like, the serious thing, he wanted to get rid of ARPA-E. I don't know if you remember that. Romney actually also wanted to do that. But, you know, they actually both went after-- PBS or NPR-- sorry, and ARPA-E which is very interesting. It means they're smart. You don't go after the state by cutting its budget 'cause that easily comes back. You know, Theresa May is spending, Trump is spending. You go after the organizational structure, the value creation process in the state.

And in that sense, it's very depressing. The probability is zero. But, you know-- you can get rid of him. (BACKGROUND VOICE) I-- I had lunch today with Alexander-- I think-- I'm sorry, last question was on the addiction--

JEFF MADRICK:

Question on addiction.

MARIANA MAZZUCATO:

I-- so this is, I mean, Elsa's (?) here and she works with-- Médecins Sans Frontières-- or am I saying it right? Doctors without Borders, sorry. And-- and-- as, you know, all the other (UNINTEL) folks so precisely working on that. And that's why I, you know, went to them for funding because, again, innovation having not just a rate but a direction. Who sets that direction?

And increasingly it's the pharmaceutical sector itself, big pharma, setting the direction. Exactly the opposite, as I said, of what happens in the military. And so by actually bringing in a mission-oriented perspective into the health sector there's actually in this report we're writing an interview with someone called Geoff Ling who was a military general heading biotech for DARPA, right, the funders of the internet.

He wants to set up a HARPA now, a health ARPA. And that would be very different. Instead of allowing the pharmaceutical industry to capture you basically just showed us a huge, you know, capture of government agencies, the FDA, in the same way that the SEC was-- was also captured. Huge problem.

But that's also because government in that sector hasn't allowed itself, I mean, they spend all this money on NIH. But it-- it-- it isn't as directed, say, as, you know, the DARPA kind of investments. And so what would that look like? And why not really rethink that? And it's really interesting that there is this movement actually for HARPA which we're hoping that this new--

JEFF MADRICK:

We better--

JOEY SPEVACK:

--report gets--

JEFF MADRICK:

--move on. We're gonna go as quickly as we can and so is Mariana.

MARIANA MAZZUCATO:

Oh good. (LAUGHTER)

JEFF MADRICK:

We don't have much time.

RICK MCGAY:

Hi-- Rick McGay at the New School. My-- this is great. I'm trying to connect and-- and help me how the reconceptualization of value connects up-- to all these great cases. I think you're a little unfair to Smith 'cause Marx does productive, unproductive labor too. Right? They're trying to figure out where wealth and growth comes from in society which I know is o 'course you are as well.

But sort of what I'm hearing at-- in the cases is, well, government should front end the goal. Maybe the private sector does it. And then they shouldn't make as money as they do. But I think you have something, I mean, sometimes we have examples where government works well. And then sometimes it makes mistakes. Same thing with the private sector. How does value help us figure out how to make that work better?
(OFF-MIC CONVERSATION)

MARIANA MAZZUCATO:

Sorry? Price.

JEFF MADRICK:

There was somebody back here-- this gentleman here in the--

JOHN ALLEN:

Thank you. John Allen. First of all, how do you measure value if you don't use the price at which somebody will pay for goods or services or the cost at which somebody will charge for that? And also, yes, we are short-term oriented here. But when you look at a Warren Buffett at Berkshire Hathaway that's value investing and it's been one of the most profitable increases of value ever.

And it's all long-term, even though he never plays a dividend. But I think the solution to some of the problems you're raising is two-fold. One is globalization and the second one is global communications. 'Cause if a pharmaceutical company here tries to charge a huge amount, maybe the Indian economy or Indian innovators will come up with an alternative and we'll have tourism-- medical tourism.

Or alternatively you and the rest of us have access to what's happening in Denmark or in Turkey or in Singapore. And there's no reason why we can't implement that at home. And I-- I get the feeling it's too much government versus the private sector in what you're analyzing.

JEFF MADRICK:

I know we could ha-- I'm getting the feeling everybody wants to participate here. And-- we just can't handle everybody. I'm going geographically around the room. So there's no method to this madness (UNINTEL). Over there.

MONIERE:

Thank you. I heard your talk yesterday on the radio. First of all, my name's Moniere (PH), I'm from Tunisia. And-- I heard your talk on the radio yesterday. And someone brought up the question of-- autonomous networks and cryptocurrencies. Right now finance is doing a lot of-- damage for that industry-- because everybody's using it as an investment tool-- when I actually see a value in machine work. Machines can be put to work and actually create value and-- a human centered value maybe. What do you think of that? Or what's your take on that?
(JEFF MADRICK: UNINTEL)

MARIANA MAZZUCATO:

Yes. The three. Are-- are you gonna take other three or are these the three? That's--

JEFF MADRICK:

Yeah, we better go with--

MARIANA MAZZUCATO:

Okay. So-- sorry? What's that--

JEFF MADRICK:

An administrator's waving an authoritative hand at me.
(OFF-MIC CONVERSATION)

Can we-- try to quickly answer these questions?

MARIANA MAZZUCATO:

I’ll super quickly answer these. OK. So Rick, I must have been very unclear. So (LAUGH) the way in which this, again, tautological situation occurs, for example, in health where it-- the-- the price of a drug is not based on the different-- and it's not just government. It's increasingly, by the way, in many different areas like energy and health, the third sector, call it charitable non-profits, right?

Collectively created medicines, right, if-- if the focus is not on the objective conditions of production-- who did what, but on narratives and myths of who did what, right, so the power of big pharma being able to continue. I mean, it's quite striking because many pe-- I mean, this is an actually an area that many people know is quite wrong.

But again, the tools for really unpicking right as-- value based pricing is so problematic because it's just kind of almost popped up out of thin air. Right? Because first the whole point is that they were revealed to be lying when they said we are the only ones investing in all-- in all this R&D. We have to recoup our R&D costs.

In some ways, that was kind of-- almost a classical way, right? 'Cause they were actually talking about production. We've done all the production so of course we should have high prices to recoup those costs. It was revealed actually you didn't. There was all these d-- different actors. So why are you the only benefiting and why shouldn’t those prices reflect that collective contribution. Right? So this disassociation of the emphas-- of the-- I, right, we are no longer looking at the actual production. But just on these mythological stories and then the price mechanism itself revealing where that value is, that becomes the problem. Right?

So actually bringing back the focus on not just how production takes place and innovation, the division of labor but also what is to be produced, this notion of if it's a health care system that is being, in fact, heavily publicly financed, what kind of health care system do we want? So that relationships between the different actors and, again, it's not just public and private, being determined and cocreated and structured and designed in such a way to produce the value we want versus assuming that somehow the price system will get you the value-- is the point.

(OVERTALK)

MARIANA MAZZUCATO:

John Allen-- sorry?

JEFF MADRICK:

Yeah, similar answer there. But (UNINTEL)--

MARIANA MAZZUCATO:

Sorry?

JEFF MADRICK:

--go ahead.

MARIANA MAZZUCATO:

Similar?

JEFF MADRICK:

I thought the answer was also appropriate for this question.

MARIANA MAZZUCATO:

Right. Similar to John Allen's question.

JEFF MADRICK:

Yeah.

MARIANA MAZZUCATO:

Yes I would argue yes. (LAUGHTER) To be quick. On cryptocurrencies, I mean, what's interesting is if you just also look at-- because also you're talking about machines, no? The-- (OFF-MIC CONVERSATION)

MARIANA MAZZUCATO:

Yes. So w-- well, tomorrow I'm actually going to Silicon Valley to present the book. And one of the-- one of the-- sessions that I'm having over lunch is gonna be chaired by Tim O'Reilly and it's all apparently going to be with different-- AI people and thinking also about the question of how do you actually in a situation where you have autonomous networks and you actually don't have people, right.
(OFF-MIC CONVERSATION)

MARIANA MAZZUCATO:

Exactly. So where do these things come from? You know, where, I mean, even autonomous vehicles, where do they come from?

JOHN ALLEN:

That's a whole different story that the need--
(OVERTALK)

MARIANA MAZZUCATO:

But it's not a different story because then these-- first of all, there is time and effort being put in, there's also rewards coming from them. Right? This is actually one of the areas that is reaping the highest rewards right now. How those rewards are distributed currently is not unrelated to what happens next. Both in terms of how you shape that system, right? So i-- it's-- it's--

JOHN ALLEN:

The decisions (UNINTEL).

MARIANA MAZZUCATO:

The decisions behind it but also, I mean, one of the striking things again with neoclassical economics is that compared to-- classical economics where there was a very strict relationship in understanding how production was then related to distribution. Right? Profits, wages, rents, and interest depending on how, you know, who owned the means of production, how production actually took place.

So again, Marx's big concern was the-- was the effect of actually mechanization precisely on the profit/wage relationship because the exploitation of labor is, in some ways, it's exactly the question you're asking. In Marx-- but I know you're not saying it as a Marxist-- in Marx, growth or surplus val-- so profits in the system were driven by the ability to exploit labor. If you no longer need labor because you have, you know, an increasingly mechanized system, where are profits gonna come from?

JOHN ALLEN:

I have a follow-up question. (LAUGHTER)

JEFF MADRICK:

I don't think-- we don't have time. There's a follow-up room right out here.

MARIANA MAZZUCATO:

That's-- (LAUGHTER) can I just say-- I just wanna say that that's a mis-- I personally think that's not the question that we should have today. It's how are we actually collectively deciding-- not just, you know, how to restructure the health care system, how to think about the equivalent of the moon shot that I was talking about before.

But how can the distribution of the rewards themselves be better aligned to the creation of these systems. So where in your approach do you think these things-- these possibilities are coming from?

They are actually coming from ara-- you know, rearrangements of production factors. Well, where are they coming from? It's not manna from heaven. Yeah. But that's currently completely disassociated from how the returns from the systems are re-- distributed in the economy to produce kind of the next round of future opportunities.

JEFF MADRICK:

Okay, let me-- (CELLPHONE) thank you all for coming. (APPLAUSE)

MARIANA MAZZUCATO:

Thank you. Thank you, Jeff.

JEFF MADRICK:

You know, if I'm on-- let me thank OSF, let me thank Mariana. I just wanna wrap this up with one comment. (APPLAUSE) The d-- the-- the do-- the go-to solution by most progressives for creating jobs is infrastructure. Unanimously. Mariana writes, "Infrastructure is a modest demand." I think that summarizes your book.

MARIANA MAZZUCATO:

Thank you. (APPLAUSE)

* * *END OF TRANSCRIPT* * *