

**Demetri Kofinas:** 00:21 What's up, everybody. My name is Demetri Kofinas. And you're listening to Hidden Forces, a podcast that helps investors, entrepreneurs, and everyday citizens get an edge by equipping themselves with the knowledge needed to anticipate the challenges and opportunities of tomorrow. By sharing my critical thinking approach and by challenging consensus narratives about the power structures shaping our world, I help you make the connections to see the bigger picture, empowering you to make smarter decisions.

**Demetri Kofinas:** 00:54 On this week's episode, I speak with Mariana Mazzucato, a professor in the economics of innovation and public value at University College London, where she is founding director of the UCL Institute for Innovation and Public Purpose. She is the winner of numerous prestigious international prizes, including the 2020 John von Neumann Award. And chairs the World Health Organization's Council on the Economics of Health For All.

**Demetri Kofinas:** 01:21 She is also the author of three highly acclaimed books. The latest of which is, Mission Economy: A Moonshot Guide to Changing Capitalism. In it, Marianna argues that if we want to meet the principal challenges facing us in the 21st century, we need to rethink the capacities and role of government, and above all recover a sense of public purpose, and I would argue, the common good. We need to be innovative, collaborative, and mission-oriented in our thinking, while also taking a stakeholder view of public private partnerships, which means that when we take risks together, that we also share in the rewards that derive from those risks.

**Demetri Kofinas:** 02:02 The purpose of today's conversation is to help you think bigger about how we as a community of citizens and nations can mobilize our resources in a way that is bold, inspirational, and oriented towards solving the most wicked social problems of our time. This means changing government tools and culture, creating new markers of corporate governance and ensuring that corporations, society and the government can coalesce around a common set of goals, ambitions, and objectives.

**Demetri Kofinas:** 02:33 In the subscriber overtime, Mariana and I, discuss how the politics of divisiveness impact our ability to work towards mutual shared outcomes. Why Western society seems to have become more individualistic, and what we can do to shift our cultural awareness towards a more collaborative mindset when it comes to value creation in both the public and private sectors.

**Demetri Kofinas:** 02:57 And with that, please enjoy this highly engaging and educational conversation with my guest, Professor Mariana Mazzucato. Mariana Mazzucato, welcome to Hidden Forces.

**Mariana Mazzucato:** 03:14 Thank you so much. Happy to be here.

**Demetri Kofinas:** 03:16 It's great having you on the program. As you were saying, we had tried to do this some time ago. I feel like it was two years ago, pre-COVID, and I was supposed to have you in the New York studio, and I insisted. And we were going to find a day and time to do it, but then COVID hit.

**Mariana Mazzucato:** 03:30 That's right. So, luckily for you, I keep writing these books because that was for the previous book.

**Demetri Kofinas:** 03:35 That's right. It was for The Value of Everything.

**Mariana Mazzucato:** 03:37 Exactly.

**Demetri Kofinas:** 03:38 And you've also written The Entrepreneurial State. I haven't read The Entrepreneurial State, but my sense is that this book pulls from that book as well. Is that right?

**Mariana Mazzucato:** 03:47 It does, in terms of, in some ways these last three books have built on each other. The Entrepreneurial State was really about uncovering all the different types of public investments that are basically in all our smart products. The reason that iPhone is smart and not stupid is because of the internet, GPS, touchscreen, Siri. And all of those investments came out of the public sector. And these were purpose driven public organizations like DARPA.

**Mariana Mazzucato:** 04:11 And really what The Entrepreneurial State did was, not only uncover that history also with energy, with digital platforms, with pharmaceutical industry or the public investment, but then also ask the difficult question, "How come we're socializing the risks with that innovation and not the rewards? Who's actually benefiting from all the profits that come about from that collectively creative process?"

**Mariana Mazzucato:** 04:32 The Value of Everything then asked, "Well, perhaps it's also because our underlying theory of value has been hijacked by a very siloed economic thinking of value, only created a business. And the best that the government can do is fix market failures." And I went back and 400 years of economic history and looked at how value used to be talked about, and basically then argued in the book that we are currently confusing prices with value. And that's also hurt our ability to distinguish rents from profits. So, value creation from value extraction. And I talk about why that really matters. And by the way, Mark Carney picked up on that in his Reith Lectures, which was great.

**Mariana Mazzucato:** 05:11 And then in The Mission Economy book, what I do is ask, "Well, what does this all mean, then how we should be designing or economic policies, both macro, mezzo, meaning industrial strategy, but also micro policies in terms of how to really transform corporate governance?" Because of course, all the challenges we have today, whether they're climate change, the digital divide or health-related challenges require both public and private investment. And yet if we have the wrong framing for public investment, not only do we get the wrong kind of public policies, but also the wrong kinds of partnerships.

**Mariana Mazzucato:** 05:42 And so, really what The Mission Economy book does a step backwards and say, "Look, we've got huge problems, one crisis after another, the financial crisis, the climate crisis, the health pandemic, what are we learning from these crises in terms of how to restructure the governance of the public sector, of the private sector and especially their relationships?"

**Demetri Kofinas:** 06:01 So, I think that the question that comes immediately to mind is, what have we learned from this latest pandemic? So, but I want to put a pin in that. I'll ask you that in a bit. Before we do any of that, I'd love to know more about you. Tell us a little bit about yourself. How did you get into this business and what business are you in? When people ask you what you do, that must be the most

complicated question. So, how do you answer that, what do you do? And how did you get here?

- Mariana Mazzucato:** 06:25 I'm a mother of four teenagers, who are driving me crazy during lockdown. Okay. So, first of all, I guess my first identity is I'm an academic. I made the choice to work in the university. I don't work in Goldman Sachs. I don't work in McKinsey. I work in a university. It's a large public university in Europe, in London called University College London. By the way, almost all good public universities in Europe are public. There's very few private universities. Oxford and Cambridge are public state-run universities, which is interesting. Sometimes we forget that in the US, where the Ivy Leagues are basically all private.
- Mariana Mazzucato:** 07:03 Anyway, so I am a professor. But what I do is I also direct an institute. So, I direct my own department. I founded a new department. It's not just a center, is a full department in my university called the Institute for Innovation and Public Purpose, where the whole point is really to join up new economic thinking with new practices. There's no point in just complaining and saying capitalism is broken, and then not actually contributing to a new framework. But then if you're contributing to a new framework, you're not getting your hands dirty with testing out the new framing. That's also not very useful.
- Mariana Mazzucato:** 07:36 So, what the institute does is practice-based theorizing. We theorize about better ways to govern our system, but then we go help different actors, mainly governments, but not only implement these ideas. For example, if we argue that we need more patient finance, not impatient finance, it's interesting to ask what kind of structure should public banks, for example, have, public banks that provide patient, long-term committed strategic finance. What do we know about their governance or accountability? And what is their place in a broader ecosystem of finance?
- Mariana Mazzucato:** 08:09 So, with my Institute, we've worked on that in countries like Scotland, where we helped set up from scratch a public bank. Or in Europe, we help redesign the whole innovation program towards being mission oriented. I'm sure we'll talk about that later. But also in countries with their industrial strategies, helping them redesign their strategy, so they're not just about a list of random sectors, but again, problems that all sectors can contribute to. And all those different cases, that means working maybe over two year period with policy makers, not just going there and professing our great ideas.
- Mariana Mazzucato:** 08:40 And that for me, it was very important to set up an institute, where we had both academics, but also people that are semi-academic, semi-practitioners, who would then be part of the team on the ground to help implement the ideas, and then bring back that learning to the theory.
- Demetri Kofinas:** 08:55 Where and when has such a model of public banking been effectively deployed in your understanding?
- Mariana Mazzucato:** 09:02 So, the broader question is patient finance. There's different forms of patient finance, one of which can be public banks. But let's not forget, there's also public venture capital funds, for example. So, Israel has had Yozma, a public venture capital fund. Without that, Israel would not be startup nation. Or there is public wealth funds, sovereign wealth funds in public banks.

- Mariana Mazzucato:** 09:24 So, public banks, for example, in Europe, we have the European Investment Bank. That's a public bank at the European Commission level. But of course, Germany, for example, has the KfW, which was actually set up during the Marshall Plan in order for Germany to recover. Italy, the country I'm from, has a public bank, but I don't think it's very well-designed. It's basically been a handout machine.
- Mariana Mazzucato:** 09:44 So, this is one of my core points, which is, it's not about public or private bank or public bank, it's how do we actually structure all the different types of organizations on the ground that collectively are important to co-create the economy, but also direct that economy in ways that produce the kind of results we need, for example, inclusive and sustainable growth, instead of just financialized form of growth or other forms, or growth that's basically killing our planet. If we care about the direction of growth, not just the rate of growth, what is the role of different types of institutions.
- Mariana Mazzucato:** 10:21 And the public financial institutions, historically, have been very important for actually providing that patient long-term finance. But if they're just handout machines, giving money to whatever firm, shouting the loudest, they become part of the problem. They become part of the problem of incumbency effects, where you have the status quo sticking without change. And the role of the public sector through any sort of policy, I think should really be about creating additionality, making new things happen that would not have happened anyway, not just giving out subsidies guarantees or loans for different actors to stay in place.
- Demetri Kofinas:** 10:55 As I hear you talk, I actually do see the unification of both the value of everything and the entrepreneurial state in this book. The question of what is important and what do we value is actually central to the justification of transforming the economy in the first place. Because what you're putting forward, isn't simply as you point out, it isn't simply creating a public bank or creating a new sort of department of government, it's about rethinking the entire relationship between government and the private sector and how we create value in the first place. I just wanted to throw that out there as we continue, because I'm sure it'll develop more as we go.
- Demetri Kofinas:** 11:34 But let's go back to that question that I said to put a pin in, which was, what we've learned from the government response with the pandemic, because that really also centers us, brings us right to where we are. What have we learned both in the US and in Europe, and I guess, well, all over the world about government, about its competency, its abilities, its mandate, et cetera, from the way in which various governance, including the US government responded to and are continuing to deal with the pandemic?
- Mariana Mazzucato:** 12:04 So, we've learned that we are incredibly unprepared. Once a crisis of this proportion occurs, a pandemic of this proportion, if you have not been investing over a long period into your public administration, into your public health system, you're going to be in trouble. We are only as healthy as our neighbor is, right? Literally on our street, in our city, in our nation, and globally. Had this pandemic begun in Africa, for example, where the health system is much weaker than in China, we would all globally have been worse off. So, there's both that global dimension of the answer to your question, which is we really

hopefully will have learned that we are all in this together, right? With any sort of global pandemic.

- Mariana Mazzucato:** 12:48 And that's why it also becomes really important when we have a vaccine, that it's not enough to have a vaccine, it has to be universally accessible. So, if we don't govern the innovation system around the vaccine to foster, for example, collective intelligence, which is what the World Health Organization is calling for by pooling the patent, so we don't privatize all the knowledge around the vaccine, but also the different therapies and diagnostics, then we're in trouble. And that's another big lesson. What does it mean to actually govern the innovation process, which is so critical? The vaccine is what we're all talking about now. I don't know if you've had it yet, have you?
- Demetri Kofinas:** 13:22 I haven't. I actually had Noreena Hertz on last week. And we talked about that she had just gotten the vaccine.
- Mariana Mazzucato:** 13:28 I just got one dosage.
- Demetri Kofinas:** 13:30 Yeah. I was unsure about when I would decide to get it or not, but I think I've actually probably edged closer to just going ahead and getting it. I'm not eligible yet. But yeah, my hesitation was just around, what are the things that we don't know about it? What are the possible long-term effects? Et cetera. So, I wanted to wait as long as possible. But just given the travel restrictions around it and also just the dangers of traveling versus having taken it, et cetera, I'm probably going to end up taking it sooner than later.
- Mariana Mazzucato:** 13:58 Okay. I mean, I was assuming that that was a given that everyone is... I mean, I hope that everyone does.
- Demetri Kofinas:** 14:03 No, I wanted to wait because I wanted to wait and just see what the reactions would be, et cetera.
- Mariana Mazzucato:** 14:09 What happens. So, I mean, just coming back to the question, the first issue is, what have we realized is missing? And I do think we have very weak health systems. And strong health systems are absolutely critical in order for the suffering in a pandemic to be less than what it has to be. Right? You can't completely prevent the pandemic, but you can surely make sure that everyone, both the healthcare workers themselves are well-prepared. And that's been striking also, just how ill-prepared our systems were to make sure that frontline workers, essential workers or key workers, however any country is calling them have actually been fully resourced, even just with personal protection equipment. We failed miserably on that globally.
- Mariana Mazzucato:** 14:51 We are failing miserably in terms of also, what we did at least in the first lockdown, the first wave, to make sure that we had well-structured test and trace systems. We know that testing and tracing was absolutely critical, but that had to be governed, it had to be rolled out. In the UK, for example, we ended up outsourcing that to Deloitte, a consulting company, and it didn't go too well.
- Mariana Mazzucato:** 15:13 Whereas the vaccine rollout was nested within our national health service through the GP practices, which are community-based. And that ended up being much, much more successful. So, that also is a big lesson that how we govern a test and trace system, how we govern a vaccine rollout matters. It's not just

about technology, science and innovation to get these actual products and goods and services out there. How we actually govern that in the public interest really matters. And I think there's lots of lessons on that.

**Mariana Mazzucato:** 15:42 And lastly, I just think, these huge recovery schemes, money literally is coming out of the woodwork, isn't it? Before everyone was talking about deficits and debt, and now we have the same reaction that Mario Draghi had after the financial crisis, which is, "We've got to do whatever it takes."

**Mariana Mazzucato:** 15:58 However, what matters again are the details. So, what's been really interesting to me is to see the differences and how different countries have, again, governed the recovery schemes, with some really in some ways, embedding the build back better idea within the recovery, in terms for example of the assistance that particular companies get. And others just flooding the system with money and hoping for the best, without really structuring a better form of economy that will be more resilient afterwards to prepare us for the next crisis.

**Demetri Kofinas:** 16:28 That is certainly one of the dangers. So, I'm going to bounce around a little bit here. In the book, you discuss the Apollo missions at length. Listeners know, I've also mentioned this many times, one of my favorite biographies is that of Gene Kranz, who was head of mission control during Apollo 13, incredible book, incredible groups of individuals. It's really, it's easy to nostalgize that time in America, because there were lots of things that were wrong with it. And we were also in the middle of a really dark period, in a cold war, and the specter of a nuclear exchange. But you certainly did see, it was a time of much greater faith in government and competence as well.

**Demetri Kofinas:** 17:07 So, my question is, if we had the type of government today that we had then, how would our response, let's say in 1962, when Kennedy gave his famous speech, where he challenged the country and said that we were going to go to the moon, how would our response have been different in your view?

**Mariana Mazzucato:** 17:25 Well, first of all, it depends which crisis we're even talking about, right? This particular period we're going through is one of just another crisis on the back of other crises. So, if we think about what the Kennedy speech would be like today with climate change, do you hear any leader saying, we are going to fight global warming because it's hard, not because it's easy? No. And admitting all the mistakes that are going to happen. I mean, he was really explicit with, it's going to cost us a lot of money. It is going to be hard. We will mess up, but it's worth it.

**Mariana Mazzucato:** 17:58 So, I mean, the first question is, are we only when it's too late, only when we have a pandemic at the scale that we have now, do we realize, "Oh, we've got to do the, whatever it takes mentality." What if we did that more continuously, right? Which would then help us be so much more prepared when we have a climate crisis and a health pandemic. And that's what we need. It can't just be a big speech with a particular moment in time. It has to be how we actually ask ourselves, how do we govern our capitalist system to produce the results we want?

**Mariana Mazzucato:** 18:30 So, one of the interesting things with the Apollo program of course, is that it was results oriented. They didn't just stop at talking about the space race or beat the Russians. They turned it into a concrete mission, get to the moon and

back again in one generation. And I always argue that we need the same kind of approach for all the sustainable development goals. There are 17 goals, but these are challenges, right? Like no hunger, end poverty, transforming those into missions that are as concrete as, get to the moon and back in one generation. That requires, again, a very different way of framing the problem and then designing the answer.

**Mariana Mazzucato:** 19:07 Also, all the agility and flexibility that NASA ended up creating, because it was going to be purpose-driven. They weren't like that in the beginning. In fact, there was a famous a saying by Gus Grissom, he said it, so this was one of the three astronauts that on 1967 died in the Apollo 1 fire, before dying he said, "Jesus Christ, how are we going to get to the moon, if we can't even talk between two or three buildings." Because he couldn't hear what mission control was saying to him.

**Mariana Mazzucato:** 19:37 And on the back of that, George Mueller, would come in from Bell Labs to help direct strategy. And NASA underwent a whole process of discussion and change with it, where he led it within NASA to get NASA to be much more agile, horizontal with program officers' delegated tasks, but much more horizontal communication between all the different programs and flight centers.

**Mariana Mazzucato:** 20:00 And that was important. That organizational change was important, if NASA wanted to get to the moon and back again. So again, if governments want to be purpose oriented and fight climate change, build strong health systems, solve a big problem, which we've also realized with COVID, which is the digital divide, right? Kids in classrooms globally are not being educated the same when they're in lockdown because of the immense inequality that we have. That itself could be a mission. If you're going to be mission and purpose driven, what does it mean for your intra organizational culture structure and so on?

**Mariana Mazzucato:** 20:34 And also, I mean, the thing that inspired me the most, and I find myself talking about this more, almost than anything else with NASA and Apollo, was how they partnered with business. So, it wasn't just innovation and aeronautics. There was lots of innovation in nutrition, materials, textiles, electronics, software. So first of all, it was really intersectoral. And I think a mission oriented approach should always try to get as many different sectors to invest and innovate. And that matters in terms of how you design the mission to be outside of just a silo of one sector.

**Mariana Mazzucato:** 21:07 But what was interesting, was all the different companies from Motorola, Honeywell, General Electric, Boeing, and so on. NASA was very confident in how it interacted with these businesses. It wasn't a completely state-driven. There was lots of businesses. But how NASA partnered, how they procured in different types of solutions they required, they paid attention to the design of the contract. So, they actually moved from cost-plus contracts, which they thought could be easily gained to fixed price contracts with incentives for continual innovation.

**Mariana Mazzucato:** 21:40 And they even had in the contracts, the idea of no excess profits. In other words, that this wasn't going to become this big gambling casino. They believe, NASA, that they were adding a lot of value, obviously, to the mission. And they were going to partner in such a way that they could really share the rewards.

And one of the way to do that was not to have all their costs elevated artificially through the cost-plus contract.

**Mariana Mazzucato:** 22:02 So, this idea that you're purpose driven, so that requires organizational change, but also it requires a particular type of partnership and contract with the other actors like business. I just think it's such a useful lesson today, where obviously, any of the challenges we're facing, can't just be solved by governments, but often the problem is that the way government is partnering with business ends up to be, for example, parasitic and not symbiotic.

**Mariana Mazzucato:** 22:28 And if you want a great example of a parasitic ecosystem, look at the health sector, where you have huge amounts of public money going in, and then the prices of the medicines don't reflect that, the governance of the intellectual property rights don't reflect that and so on.

**Demetri Kofinas:** 22:42 Yeah. And the financial sector as well.

**Mariana Mazzucato:** 22:43 Of course, I mean, yeah. And in fact, with the financial sector, I mean, that's a big lesson. This time around, we can't do what we did last time, which is just flood the system with liquidity to save the short-term problem and not really structure the system to work better, so it doesn't produce the crisis in the first place.

**Demetri Kofinas:** 23:00 Right. So, that gets to something that I wanted to say very early on when you were beginning to give your answer. And there are a few other points I want to try to piece together in order to form some kind of coherent question, because there's a lot that came up for me. As you said, the pandemic came when we were already hobbled, we were dealing with already a series of issues. I mean, we had chronically low economic growth, partly, I think due to the large overhang of private sector debt that accumulated after the previous financial crisis. But we were also dealing with a huge deficit of credibility in government. Rightfully so, based off of, in the last two decades, both the response, the role of government and the relationship between government and certain private sector entities, and the boom that led to the subsequent bust, and the way in which that bust was resolved or not resolved, both, as well as the Iraq, the invasion and occupation of Iraq.

**Demetri Kofinas:** 23:57 In 1962, the US was in the last two decades the US had experienced a coming together to fight the greatest war in human history, and subsequently the victory of the Allies in that war. So, it had the infrastructure. And I think arguably perhaps even more importantly, it had, there was a sense of trust within the country.

**Demetri Kofinas:** 24:19 So, when I asked that question initially of 1962, I wonder how useful it was actually, reflecting on it to ask it that way, because we were a very different country. And so, also because of that, we had people in government who are more competent, arguably and cared more. So, for example, they were more likely perhaps to negotiate better terms on contracts. So, I guess, how do you think about that? The fact that people, the citizenry isn't where it was in 1962, so how do you account for that when you try on a practical level to actually implement the sorts of changes that you think are necessary in order to move us forward, whether we're talking about climate, health, national security, et cetera?

- Mariana Mazzucato:** 25:02 So, I mean, that's a really good question. And I think that you can either look at this as just a deterministic history that once upon a time there were really smart people in government and they knew how to negotiate contracts, and now we no longer have those people, "Oh dear, this is what happens." Or you can look at it as an outcome of ideology and political forces, and lobbying that actually have gotten us into the mess that we have.
- Mariana Mazzucato:** 25:28 And I would argue somewhere in the middle, but mainly on the ladder, which is that the way that we have framed government in recent years. And let's just put it simply, so we don't have to go into long history about this, but the kind of Reagan, Facture and neo-liberal kind of economics that has been associated with that has then landed within our public administrations.
- Mariana Mazzucato:** 25:52 And by the way, there's theories about this. So, the way we teach our global public servants has been fed by this neo-liberal view of the economy in terms of public choice theory, new public management, where basically we have convinced global civil servants that at best they're there to fix markets, or as economists like to say, fix market failures. And that because government failure is even worse than market failure, then do as little as you can, and then get out of the way, so that once you picked up or fixed the problem, then you allow the market to actually direct the economy.
- Mariana Mazzucato:** 26:29 And that has, a, affected who wants to work in government, because you can imagine that if you are... I should be careful because I actually think government is full of really, really smart people. It's just that they're constrained massively about the kind of structures they work in. But just to finish that point, if you see yourself as a value creator and you like taking risks and you believe in learning by doing, so by definition, you will have to make some mistakes and then learn from that. And you go into an organization where as soon as you make a mistake, you're on the front page of the newspaper or in the UK, The Daily Mail.
- Demetri Kofinas:** 27:03 Why is that? That's a good point.
- Mariana Mazzucato:** 27:03 So, you're not going to want to work in government. Yeah, exactly. So, you're not going to want to work in government. So, this is a thing, we have by not admitting that government actually creates value, by pretending that government is just there to fix market failures, and by blaming government, anytime it makes a mistake without admitting that actually that's part of the experimentation process. And the real problem is if you're not investing within your organization to learn from your mistakes, so that you just keep failing. Then of course, you're going to prefer to work in the private sector, where we actually often glorify risk-taking, which by definition, again, means making mistakes.
- Mariana Mazzucato:** 27:37 The whole venture capital industry, if you speak to any venture capitalist, they will say, "Yeah, for every success we had to undergo, at least seven or eight failures and mistakes." So, if the framing coming from, again, put really simply, neo-liberal economics, is that government is at best fixing markets, at worst, completely useless at what it does. And value is only created in business. That has actually structured the kinds of government organizations we today have, that affects the kind of people that want to work in government.

- Mariana Mazzucato:** 28:09 But also, the great people that do work in government that are driven by public service, end up being very constrained on what they can actually do, both because they end up fearing making any sort of mistake, because again, then that gets put on the front page of the paper. But also, there's no real culture like the culture I was talking about before at NASA, which really welcomed risk-taking, which was all about experimentation, agility and flexibility, where the average age and mission control room is 25. It ends up being very difficult actually to be imaginative, to be mission-oriented, to again, welcome experimentation and risk-taking.
- Mariana Mazzucato:** 28:42 But there's nothing inevitable in that. In other words, we've ended up with those types of public organizations that are risk averse, that are static, that are often too top down, don't have those kinds of horizontal systems, which George Mueller really cared about. But that is what I'm trying to say, is that's not a coincidence. That's an outcome of how we have talked about government since the last, basically 40 years.
- Mariana Mazzucato:** 29:04 So, if we now want to say, actually we've learned from COVID, we need government to actually lead in a crisis like this. Of course, it needs to partner with the private sector, but it needs to know what it's doing. The first thing is we need to be asking ourselves, what are the investments that we're making within our own public organizations? So, they can govern, be a dynamic partner and lead the way while galvanizing a lot of bottom-up experimentation.
- Mariana Mazzucato:** 29:28 And unfortunately, a lot of that capacity has been outsourced to the private sector, whether it's to the McKinsey, PricewaterhouseCoopers, consulting companies, or often, and I've seen this, especially in Europe, to companies like Serco and G4S, which basically just make billions getting government contracts, but not having much capability. I mean, this is the irony that they don't do too well, but there's very little accountability for failures when it's on their private sector side, just because we are so wet to thinking that the public sector is not going to be able to actually produce or really lead the way.
- Mariana Mazzucato:** 30:00 And on that, it's quite interesting, in recent years, some numbers have been popping up just in terms of how much governments have relied on outsourcing. And in the UK, we started collecting these numbers in terms of Brexit, just how much Brexit was outsourced.
- Mariana Mazzucato:** 30:15 And there was a recent interview with a Lord, a Tory Lord in the UK government, who said that all that outsourcing had infantilized Whitehall, which is the name of government here, so Westminster. So, by outsourcing your brain, you become stupid.
- Mariana Mazzucato:** 30:30 And you might remember that back in the day when Dell Computers started to become a big company, there was some management gurus who were saying that because Dell Computers was just outsourcing everything, and just basically putting together computers without making anything, that would potentially endanger their "absorptive capacity" a management speak, for meaning how you even understand your environment and are able to lead the way within an innovation ecosystem. That they would basically lose their way because they weren't making anything anymore. And the interesting thing is we never asked that about government. When government stops managing anything, when it's not producing, when it's at best, again, fixing problems as they arise, do you lose

your way? Do you lose your ability to be a proactive actor in the economy that can shape our system to be what we need?

- Demetri Kofinas:** 31:25 So, one of the big insights I had a couple of years ago when we had Bill Janeway on the show, and we talked about his book, *The Innovation Economy*, which I believe came after your book, *The Entrepreneurial State*. Was that I had this in my head for a long time, that really government couldn't compete with the private sector because it simply could never be as efficient as the private sector. And one of the aha moments I realized was that that's not the government's job. That in the context of its relationship with the private sector, the job of the government isn't to be efficient.
- Demetri Kofinas:** 31:59 So, in your understanding, what is the job? What is the role of the government? I mean, we've talked about all sorts of mechanical actions, but in essence, when we talk about setting a mission, what is it that the government can do that the private sector cannot do? And in an economy where the government is playing that role, what is possible that otherwise isn't, and that we've closed ourselves off to?
- Mariana Mazzucato:** 32:25 Great set of questions. So first of all, government obviously is responsible for many different things. And in the book, I don't pretend to talk about everything, for example, pension systems, right? But I begin with the premise that what government's role cannot be is just to pick up the mess after it happens. It has to help steer the way, be an active co-creator and co-shaper of the kind of economy that we as citizens... And I'm talking here about democratic societies, where citizens have a vote and can vote in leaders who have or do not have, unfortunately, many strategies for the future.
- Mariana Mazzucato:** 33:00 So, government in the first instance should be implementing the wish of the citizens who put them into power. Right? So, let's talk about a green deal. If someone comes into becoming a leader of a country, because on the platform of a green deal, you have lots of different levers through which to make that happen. You are not there just to have a slogan and a speech, and then you come in and you just pretend that you have no power.
- Mariana Mazzucato:** 33:24 Governments have lots of power, how they use that power to direct change really matters. And they have much more money than we often pretend they have. I was talking about public debt and so on. First of all, governments can create money as they always do when they go to war. There's never been one war where a government said, "Oh, oops, sorry, we can't go to Afghanistan, Korea, Iraq, Iran because we don't have money."
- Demetri Kofinas:** 33:46 Quite the opposite.
- Mariana Mazzucato:** 33:46 They create the money, right? So, the first thing is, when do governments create the money? Well, they create the money when they think something is urgent. And war has often been seen as a security risk and an urgent thing that government has to do.
- Mariana Mazzucato:** 33:58 So, the first question is, why don't governments see as urgent and treat as urgent, all these other kinds of social problems that we have, which then when not attended to create a massive crisis, like both the climate crisis and the health crisis, which then all of a sudden it kind of too little too late, they say,

"We have to do whatever it takes." But it's too late because you haven't been funding the kind of systems we need.

**Mariana Mazzucato:** 34:20 But so the other thing is, even if you just look at how much governments spend every day, even without talking about it, procurement budgets are huge. Procurement is often up to 40% of what a government spends. My procurement, I mean, government as purchaser, all the things that governments procure in order to build schools and motorways, and so on.

**Mariana Mazzucato:** 34:38 Procurement can be an innovation budget, right? How government, not only invests and all the kinds of things that I talk about in Entrepreneurial State, the internet, GPS, Siri, but also on the demand side, what it wants in order to build the social and the physical infrastructure. That can be done in different ways. It can be done terribly, where you literally just have a static relationship, again, with the organizations that you're procuring from. And it's literally just bricks and mortar, and cement. Or you can use for example, green procurement for everything, from the public transport, public education to public health system, and that would galvanize and catalyze a particular direction to your economy.

**Mariana Mazzucato:** 35:17 So, I guess the big answer to your question, is I think governments, their main goals should be helping to direct the economy, not in a top-down way that tells everyone what to do, but directing it, which really steers through the use of all of its levers, from procurement grants, loans, and so on, steers our economy to actually be in the direction of what in theory we want, which is inclusive and sustainable growth today because everyone's talking about that. But it can also steer the economy in ways that maybe today, we think aren't so great, whether it's just focusing on wars. But we should also remember that fracking, which many people today say, is problematic also geologically for what happens underneath the surface, that itself was invested in by government.

**Mariana Mazzucato:** 36:00 So, this isn't a normative point. I'm not saying government ends up doing good things. But government's role is to help make things happen that wouldn't have happened otherwise, which in theory, it's framing as being good for society. The problem is that whether this is a dictator or a democratic elected leader, and who's contesting on the other side. And social movements are often contesting on the other side. To make sure that government is actually doing its job to bring us in the right and not the wrong direction. We need to bring that into the picture too.

**Mariana Mazzucato:** 36:30 And I really believe that the kind of economy we have in the end is an outcome of the kind of governments we have, the kind of private sector companies we have, but also the degree to which social movements, whether it's the labor movement, the green movement, today's student movement, Fridays For the Future, are able to impact that process.

**Mariana Mazzucato:** 36:47 We wouldn't have weekends, by the way, we wouldn't have eight hour work days without trade unions. And that helped to form the kind of markets we have today.

**Demetri Kofinas:** 36:54 Yeah. So, as you still write in the book, a number of times, this is a wicked problem, because it involves so many different actors and interest groups. When you were talking about war, I mean, there's obviously a much more common issue for the United States than it is for Europe. The European

countries are much better at investing in non-military related social causes, so to speak. How much of that is because countries and governments develop economies of scale around things that they've invested in for a long time?

**Demetri Kofinas:** 37:25 So, the US has created huge economies of scale, one. Two, it's created embedded interest groups within the government around military product procurement, equipment, et cetera, spending. That's one question. And how do you deal with that?

**Demetri Kofinas:** 37:41 And then the second question is where and how, because this second question moves us more towards, again, continues to move us towards the practical. Where and how are these conversations, that kind of conversations that you're having, where and how are these conversations happening around government circles and people that are actually in the position of making policy?

**Mariana Mazzucato:** 38:03 So, I'll actually connect the two questions. Because one of the places where I found these things happening in terms of the conversations is in Scandinavia, where, for example, in Sweden, they have a very clear mission, very high level, which is to have a fossil free welfare state. And then they land this on very concrete missions like the school meals have to be healthy, tasty, and sustainable.

**Mariana Mazzucato:** 38:27 And so, if you look at the whole value production and distribution and consumption of school meals, what does that mean to have a very clear mission that they have to satisfy all three of those goals? And what does it mean to bring students into the process and to that kind of co-creation and co-design, so it's both studying it through the curriculum, but students can be part of designing school meals, so that they're actually getting more tasty, healthy, sustainable. And the sustainability angle can come strongly into the curriculum, but they can also be part of the process of monitoring.

**Demetri Kofinas:** 38:56 How early do they bring them into the process?

**Mariana Mazzucato:** 38:59 Well, I mean, first of all, this is new that's happening around the school meals in Sweden. And this is a project that we're working with them on. Because in the UK, I was working with the government around its industrial strategy, helping it again, to be more challenged and purpose-driven. That's just about a list of sectors. And one of the people who worked with me on that then went to Sweden and worked as the head of strategy for the Swedish government's innovation agency, Vinnova.

**Mariana Mazzucato:** 39:22 So, this school meal mission is actually happening literally as we speak. And I think the answer is, because they're trying to do this, is to bring them in very early, right?

**Mariana Mazzucato:** 39:30 I mean, if the whole point is to have a purpose driven, problem oriented, challenge oriented type of policy, the first question is, who is even deciding what's good for us? Getting away from this benevolent, dictator mode, where someone is telling us that it's good to be carbon neutral. How do you really get people to buy into that and to be part of the, again, design, but also the monitoring?

- Mariana Mazzucato:** 39:53 One of the good things about DARPA, by the way, which funded the internet, is that they also knew when to turn the tap off. They weren't just funding stuff. When things weren't going well, they would stop funding it over a relatively long period of time, because you can't stop as soon as things go wrong. But as you realize that you're going down the wrong path, you can't just keep doing it just because someone's career is on the line.
- Mariana Mazzucato:** 40:12 So, similarly, what does it mean, not just for an organization and the way we talked about before in terms of organizational culture, to know how to pivot, but how can we bring citizens into the process? So, as things aren't going well, if we're not really building the kind of sustainable cities we talk about, if the school meals are maybe sustainable, but aren't very yummy, so people aren't eating them, then who's going to be part of that kind of calling out the system, the accountability, the governance, to make sure we do pivot?
- Mariana Mazzucato:** 40:38 And I think that's really important that we think of it both organizationally, because again, lots of public institutions will fear that kind of failure and might just keep going on because someone's job is on the line. But also, what does it mean for the engagement process, where coming back to the sustainability agenda to bring citizen assemblies to the fore, right? So, the debates that are actually needed to contest the idea of a better way, that it's not just fed through as a top-down plan, but really is co-creating, co-design.
- Mariana Mazzucato:** 41:09 And here, I think we need to be careful because it's neither top-down nor bottom-up. If something that's completely bottom-up and you have a referendum for every little thing, it's going to be chaos, complete chaos.
- Mariana Mazzucato:** 41:19 So, what's interesting, I think about the mission oriented approach is that you need very clear direction, concrete goals that will be intersectional and interactive, but also the design challenges. How do you redesign procurement and all the different levers government has to crowd in as many different actors and experiments as possible to fulfill that goal? And that's why I talk about picking the willing, not picking the winners.
- Mariana Mazzucato:** 41:43 Just one thing I wanted to bring up, because we talked about it before, outsourcing. This is something that the NASA people were aware of. They said that if government doesn't have its own capabilities, if it's not investing in its own resources to be dynamic, to be able to pivot, to be able to be agile, but also knowledgeable within the different areas, it's going to be captured. And they talked about it as being captured by brochure-manship, which is funny as a term because it makes you realize that they didn't have PowerPoints back then, they had brochures, right? A company would come in with their brochure and say, "Oh, give us that contract."
- Demetri Kofinas:** 42:16 And the model in the back of the truck. I don't know. I mean, this is not exactly. I'm going a little bit off here, but there's that movie, the McDonald's movie, where the founder of McDonald's was traveling around the country with one of those milkshake blenders. Anyway, yeah.
- Mariana Mazzucato:** 42:31 Right. So, these are all issues, again, organizational culture, knowing how to take risks, but also when to admit things aren't going well, but also investing within your own capabilities in order to be a dynamic partner alongside business. What could go on and on, and you just realize, this is not the type of public institutions

we have today. And this notion of outcomes-based budgeting. That first you worry about what the outcome is. And then you work backwards to think about the budget you need.

**Mariana Mazzucato:** 43:00 And this, by the way, is something that I'm going to be working on with The World Health Organization, where Dr. Tedros, the leader, asked me to lead a council, which is the WHO Council on the Economics of Health For All. We'll be announcing the membership soon. I'll give you the inside knowledge. That's going to be all women. And if you ask me, why? I'll say, why not? So, ask me, why. No, anyway.

**Mariana Mazzucato:** 43:23 And the idea is to do the reverse of what's usually done. Usually people say, "Oh, invest in health because it's good for the economy." When they're trying to make that link. And we're saying, no, invest in health for all, coming back to your first question, what have we learned? Well, health for all matters. We're only as healthy as our neighbors. And work backwards and ask, what does it mean for the economy? What does it mean for the financing? What does it mean for the public private partnerships? What does it mean for the budgeting? What does it mean for how we think about our debt and our deficits when we're building our social infrastructure?

**Demetri Kofinas:** 43:56 So, it seems to me, and I want you to tell me if I've got this right, that the real challenge here, it's not technological, it's not institutional, it's not educational. I mean, we have the know-how exists. It seems to me that it's really about, and then bringing it back to this point about it being a wicked problem, it seems that it's really about stakeholders. And that you have people, everyone in society or many people rather, that are invested in the way things are done today. And many of those people might be willing to change, but they need to get the assurances they need in order to be willing to give their support to something.

**Demetri Kofinas:** 44:30 So, it seems like it's really about getting that initial stage of the conversations and getting stakeholders into this process, and getting people invested and supporting it. Does that sound right? Is it really a political issue first and foremost, and not a political issue of going to the Deimos, going to the citizenry, trying to use the bully pulpit, but really to actually get the major institutional interests to buy-in to a plan?

**Mariana Mazzucato:** 44:57 It's definitely that, but it's not only that. I mean, that is part of the wickedness of the problem, right? Which is anytime you're talking, not just about technological change, but something like climate change or again, the digital divide or our health systems, that requires also regulatory change, behavioral change and so on. However, I think what we need are all three of those different things you mentioned. First of all, of course, we need enough money to actually be investing in the actual resources we require to invest and co-create and to innovate together towards these solutions. Right?

**Mariana Mazzucato:** 45:30 So, the fact that so many countries don't have that, they have not been putting enough public nor private investment into solutions, not even about the really complex ones like climate change, but even just building basic infrastructure or funding enough, or education system and research and development system. That of course is a problem. And that's literally a decision about, are we going to be investing in long run growth or just, what we think is going to help us this week or this month?

- Mariana Mazzucato:** 46:00 So, a long run perspective is the first thing that's needed. And if we care about long run growth, we need to be investing in all those things that we know. And this is one of the few things that economists agree on, all those things that actually do foster long run growth and productivity, again, education, research, or social and physical infrastructure.
- Mariana Mazzucato:** 46:19 But the second point is that's not just money thrown into a big pot called R&D or education, structures matter. So, in many countries there's a lot of public funding of things, but they don't have the right dynamic and capable public structures, nor do they have the right private structures. In many countries, including the US, the private sector has become overly financialized, spending more money on share buyback say, than on research and development and on any re-investment within production itself, including worker training.
- Mariana Mazzucato:** 46:50 So, that problem of, maximizing shares versus maximizing stakeholder value, we know is an issue in the corporate governance world. And because the economy is an outcome of how both public and private are governed, and also how they interrelate one with another, the fact that in many systems, both the public and the private are governed problematically is a problem.
- Mariana Mazzucato:** 47:09 And the third one is the one you mentioned, which is just as important. So, I say third, not meaning third in terms of chronology, but also incredibly important, is how we structure engagement. Even if the government is really interested in climate change, how does it really galvanize as much interaction in the economy around that topic as it can in order to really, to behavioral change, but also to create trust. As you mentioned in the beginning with COVID, it's much easier to govern a crisis when the citizens trust the political leaders.
- Mariana Mazzucato:** 47:40 And what I found really interesting in places like Vietnam and Kerala in India, is because there were stronger trust between citizens and government, they did so much better. They also better because they had been investing in the last years actually within their public administrations on the back of previous crises, they had faced. And they made that explicit decision to also build a stronger interrelationships between academia, government, business, and also citizen groups.
- Mariana Mazzucato:** 48:04 But that level of trust, but also how, for example, capital, labor government come together, that itself is an outcome of design. So, the fact that, as I mentioned before, I think I mentioned before, in Scandinavia workers are on the board of companies. That's a design issue. It's not just like, "Oh, let's all get along and let's come together and engage with citizens." No, that is within their policy of corporate governance, workers have a voice.
- Demetri Kofinas:** 48:32 And the same case in Germany as well.
- Mariana Mazzucato:** 48:33 Yeah, exactly. And many, well, there's varieties of capitalism. This isn't about capitalism versus communism. This is about there's different ways of doing capitalism. We've done it in so many places in the wrong way. And let's learn what works, what doesn't, globally.
- Demetri Kofinas:** 48:46 So, is the other side of this coin, also a rethinking of capitalism. In other words, it isn't just about rethinking the government's role. It's also rethinking how capitalism works or should work.

- Mariana Mazzucato:** 48:58 Absolutely. I mean, that's why in the title of the book it's, *Mission Economy: A Moonshot Approach to Changing Capitalism*, it's absolutely about admitting we have the wrong form of capitalism in the first chapter. Or the second chapter, I go through all the problems we have. We have, again, an overly financialized financial sector.
- Demetri Kofinas:** 49:15 Highly extractional.
- Mariana Mazzucato:** 49:17 Well, the financial sector is basically financing itself, right? In the UK where I'm sitting today, 80% of our finance goes back to finance, insurance and real estate. It doesn't even reach the real economy, let alone the good stuff in the real economy that we've been talking about.
- Mariana Mazzucato:** 49:30 Then the business sector, and this the second big problem is, as you just said, highly extractional in terms of ever increasing amounts are getting extracted out in the form of share buybacks, dividend payouts, not even getting back into long-term production systems. And that's a huge problem. You see this by the way, with global investment figures. And you also see it when people are blaming robots for taking our jobs, it's completely wrong. Robots have always taken jobs. Mechanization has always been labor displacing in the last 200 years of capitalism. What's new is that the profits being generated, aren't getting reinvested back in. They're getting financialized. So, that's a second big problem.
- Mariana Mazzucato:** 50:07 A third big problem in capitalism is again, the structure of our government's best fixing markets. We've talked about that already. And the outcomes of that, or again, of those three big problems, business, finance and government, all being problematic. Or again, the crises that we're currently facing, financial crisis, climate crisis, health crisis, which of course is related to the climate crisis, if you read about what's going to happen when the permafrost starts melting and all the new viruses that come out from that, that's not going to be good news for us.
- Mariana Mazzucato:** 50:34 So, the book is definitely about change. Well, first of all, it's about admitting where we've gone wrong. We can't change things unless we really go to the source of the problem. And I don't blame government for being the source. But unless we have a new form of government, we're not going to have change. I talk a lot about the dysfunctions in the private sector and government.
- Mariana Mazzucato:** 50:52 And in the end, it is about changing capitalism. But there's no point in changing capitalism if we think everything's working well. So, connecting how, what we're doing now wrongly is related to these dysfunctions we have and how we then have to do things differently in order to have a better result, is what the book's about.
- Demetri Kofinas:** 51:11 So, Mariana, I'm going to move the rest of our conversation into the overtime. There are three, I mean, there are probably more, but there are three things maybe that... What's the descriptor for them? That I would like to cover with you. One has to do with what I think is a troubling politics of divisiveness, both on the left and on the right. The flavor is different. But each party, I think caters to a divisive ideology around how it relates to the public. And that seems to me to be disjointed with the idea of building a mission driven state. Because you need to have a sense of common good, and common identity in order to move

in that direction. So, I'm curious what your thoughts are on that? If you agree, and then how do we go about fixing that.

- Demetri Kofinas:** 51:58 Another one has to do with, it's similar to this, and it has to do what I feel is a society-wide move from a more collectivist view, I guess, of identity to a much more individualistic view, and a move from a collaborative view of value creation to a much more competitive one. I wonder again, if you agree on that. And if you think how and why you think that's happening, and how we might go about changing it?
- Demetri Kofinas:** 52:30 And then the last one is to maybe speak in a bit more detail, maybe with a country like Germany, we talked about Sweden, but where you think this model has been best implemented. Is it China? I don't know. Those were off the top of my head.
- Demetri Kofinas:** 52:43 For anyone who is new to the program, Hidden Forces is listener supported. We don't accept advertisers or commercial sponsors. The entire show is funded from top to bottom by listeners like you.
- Demetri Kofinas:** 52:55 If you want access to the second part of my conversation with Mariana, as well as the transcripts and rundowns to this episode, and every other episode we've ever done, head over to [hiddenforces.io](https://hiddenforces.io), to check out our episode library or subscribe directly through our Patreon page at [patreon.com/hiddenforces](https://patreon.com/hiddenforces). There's also a link and a summary page to this episode with instructions on how to connect the overtime feed to your phone, so that you can listen to these extra discussions, just like you listen to the regular podcast.
- Demetri Kofinas:** 53:25 Marianna, stick around. We're going to move the second part of our conversation into the subscriber overtime.
- Demetri Kofinas:** 53:31 Today's episode of Hidden Forces was recorded in New York City. For more information about this week's episode, or if you want easy access to related programming, visit our website at [hiddenforces.io](https://hiddenforces.io), and subscribe to our free email list.
- Demetri Kofinas:** 53:48 If you want access to overtime segments, episodes, transcripts, and show rundowns, full of links and detailed information related to each and every episode, check out our premium subscription available through the Hidden Forces website or through our Patreon page at [patreon.com/hiddenforces](https://patreon.com/hiddenforces).
- Demetri Kofinas:** 54:08 Today's episode was produced by me and edited by Stylianos Nicolaou. For more episodes, you can check out our website at [hiddenforces.io](https://hiddenforces.io). Join the conversation at Facebook, Twitter, and Instagram at [@HiddenForcesPod](https://twitter.com/HiddenForcesPod), or send me an email. As always, thanks for listening. We'll see you next week.