The Value of Everything

Mariana M: What I want to do is really kind of unpick this issue of purpose and argue that unless we rethink purpose in the context of value creation, and by that I mean collective value creation that is actually going to be impossible to change the way that capitalism currently works. And of course we should remember there's varieties of capitalism and the fact that economic growth has not just a rate but also direction. How do we actually debate together through different types of stakeholders, how we can change our value chain and our inner purpose in order to redirect the system and better ways. There we go. So that is not my first slide. Very interesting. They began in the middle. Um, what happened here? Can you begin from the beginning and not in the middle? Hello? Yes. That way you get to see all my slides. Cool. Thank you.

Mariana M: Um, right. And so, um, I'm mainly going to be talking about some of the key themes and a book I just wrote with this title. You might remember that Oscar Wilde said, a cynic is one who knows the price of everything, but the value of nothing. But I want it to be quite upbeat about the possibilities of how to transform the system. So the value of everything is supposed to be already from the sparks start a positive message and given, I mean, there's a real nice coincidence here that we had Larry Fink open the aspen ideas festival yesterday, kind of reminding people of this kind of call to arms in the business community to rethink purpose, to warn against the dangers of short termism and how, unless we kind of rethink also more stakeholder view of the business itself, who you know, who the stakeholders are, not just the shareholders, then we're not going to get a very good form of capitalism and even profits, even profits, uh, depend on this kind of longterm ASM.

Mariana M: And interestingly, Lee, this call for purpose has also been echoed. In fact, it's not surprising as much less surprising in some ways in the political sphere on sort of on the left, on the center left. And so it was quite interesting that Ed Miliband, uh, when he was campaigning, he later lost. He very much kind of focused in on this issue of purpose. And in an interesting way, he really brought it to this notion of kind of productive versus unproductive capitalism and how can we steer the forms of capitalism and a more productive way, but also that really fundamentally solved some key problems that we have inequality being one of them. So what I'm going to do now is kind of, you know, just remind you, isn't this great that different spheres in both the financial community in the business community. So Paul Paulman and Unilever is calling for purpose in politics.

Mariana M: Fantastic, right? And especially after the financial crisis, I want to just pause a minute and depress you just a bit on how little has changed since the financial crisis. So in some ways I'll provoke you to think, you know, everyone's calling for a purpose, but why is nothing changing and you won't be surprised to hear that. Then I have a sort of my own view of what needs to happen for this call for purpose to become real, not just a talk but also a walk and in all the different, what I would call value creators in society that would include both public and private and third sector. So philanthropy is fundamentally have to rethink how they're operating, but also the government I think has really lost its way and thinking that it's role is really just there to kind of tinker on the edges, bail out the banks when things go bad and fix different types of market failures.

Mariana M: But we'll get to that in just a minute. So first the depressing bit, I'm going to focus on four big problems that we have. Um, the first is in the world of finance. And you know, I'm going to do this quite quickly, so pardon the super fishy Allity but you can buy my book later and there's all sorts of references I think over 500 references for deep discussions for each one of these, uh, points here. But this first one, the problem is that the way we have allowed the financial sector to evolve is problematic basically because finance has been financing finance. And by that I mean fire, so finance, insurance and real estate. And this graph here, which is from the Bank of England, which is showing the data for the UK in the US, it's very similar, shows the degree to which financial intermediation, which is basically broadly defined.

Mariana M: The entire financial sector, including shadow banking, um, has kind of outpace this is the a dotted line, uh, the growth of the rest of the economy. And as long as that finance was fueling growth in the real economy, no problem. But there's different types of studies that have shown just how much of financial resources have gone back into the financial sector. In the UK, it's over 80%. So only between 10 and 20. He goes into the real economy. Um, then you'd think, okay, terrible finances bad, let's fuel industry. The problem is that industry itself has become ultra financialized. And by that I mean that profits are increasingly being used to boost share prices. Stock options, surprise, surprise, executive pay. There's been quite a lot of work on this. This is uh, some data from the work of building masonic and his colleague, which shows that from 2008 after the financial crisis to do south and in 17 a 466 of the largest companies have spent over $4 trillion just in buying back their shares.

Mariana M: And you know, that would be fine if there was also money kind of being reinvested back into human capital in r and d. And what the data actually shows is that this rise in share buybacks has been accompanied by a fall in that kind of reinvestment in that long run growth that people like Larry Fink are calling for. And what you see at the macro economic level, the impact of this is a fall in aggregate investment. You might remember that GDP can be broken down into different components, one of which is business investment. And this lack of reinvestment back into the real economy shows up as a fall in that investment part of GDP and by the white. Let me just say something about this in case I forget to later. I often speak in parentheses. You'll get used to it. Um, this big debate nowadays, the robots are taking our jobs.

Mariana M: If you actually look at the data for the last 200 years and mechanization is about 200 years old, robots are not that new. They're just a new form if you want to machinery. Um, what we've had is that yes, Labor has been displaced by a machinery, but as long as profits were being reinvested back into the economy, even though some jobs were displaced in one part, they showed up again in another part. So I would argue that part of this robots are taking our jobs. Narrative is missing. One of the key issues, which is the big changes that have occurred in corporate governance with this obsession about maximizing shareholder value, which has had a direct uh, uh, impact on this lack of reinvestment. So this is the second problem. The third one is that the state itself and by the state, by the way, every time I use that word, don't think kind of big brother, you know, top down one big machinery.

Mariana M: I'm really talking about the decentralized network of different types of public organizations that exist in any country. I believe that the state has sort of lost its way, have stopped kind of being what I call mission oriented. Um, and kind of dreaming up the big stuff from setting up the welfare state almost a century ago to going to the moon and back again, kind of real kind of missions to simply fixing things when they go wrong. Whether that be bailing out the banks or patching things up. Too much pollution, do a carbon tax. That would be an example of a negative externality, one form of market failure funding. Those things that the private sector doesn't fund, like basic research. That's an example of a positive externality. And it's not that these market failures don't exist. They do. And there's also quite a useful tool kit and economics to think about it.

Mariana M: But if we really want a transition of the economy to create a more sustainable, inclusive form of form of capitalism, which I think will be debated over the next steps of days and this fora just tinkering on the edges and putting some bandages here and there is part of the problem. So this is the third big problem we have. Um, and the last one, the fourth one is kind of the biggest cause we will not have a planet to live on until, until we really face in a serious way. Uh, what, uh, Gretta Thornburg is talking about, which is the house is literally on fire and we've got 12 years left. And if you look at the data, Bloomberg new energy finance, yes there is some spending in this area, but even just renewable energy, apparently we're only spending about 20% of which needs to be spent in order to reach the kind of goals that are being talked about on.

Mariana M: And we should remember that the green transition is not just about renewable energy, it's about transforming the entire economy. So lowering the material content of the steel sector of course would be really important and across manufacturing anyway. So these are the four huge problems in finance, in industry, in government and the planet. Okay. So what to do and what I try to do in this book on value is to basically argue that, you know, yes, fantastic. That there's this discussion after the financial crisis about getting more inclusive and sustainable growth. Fantastic. We had these sustainable development goals that, you know, hundreds of over a hundred countries have signed up to. Fantastic. That you have people in both the business community and in politics calling for a search for purpose, uh, and long term ism and calling out, you know, the real problems that we have with the current system.

Mariana M: But why so little changing, and I kind of go to this key point that unless we can rethink how to both account for but also really aimed for a different type of value. So what value is created but especially explicitly admit that we have a stake holder form of capitalism. In other words, markets themselves are outcomes of how public, private and third sector come together. Let me just repeat that. The market is not out there, that you intervene in it when it kind of messes up. The market itself is an outcome of how business is organized, how the state is organized and the degree to which policy can be kind of smart or not smart. How the third sector, which would include trade unions or organized, we shouldn't forget that trade unions got us some of the biggest innovations of our time, the weekend not bad and the eight hour workday.

Mariana M: These are social innovations. How these different actors come together fundamentally formed the kind of market system we have and unless we really rethink purpose within each of those areas. So in the intro, organizational, um, set up of these different actors, value creators, all of them, um, and their relationships, we're not going to change things. And what's really interesting also is that after every crisis, this was after the big crash of 1929. This quote here, there's often a call for understanding again, how can it be that we're allowing so much finance, so many funds, so much of value creation to be siphoned out of the system. Let me just read this quote because it's fantastic. It's a quote by big Bill Haywood, great name, the first trade unionists in the u s and in 1929 during the crash, she says the barbarous gold barons, they did not find the gold.

Mariana M: They didn't mind it, they didn't mill it. But by some weird magic alchemy, all the gold belongs to them. And this is related to this issue of purpose. And in some ways it is capturing also part of what Larry think is talking about, which is if you have too much speculation, too much short termism this actually siphons out energy and investment from the economy. And what's interesting is if you look, and you're gonna have to forgive me a bit here because I'm going to give you a quick speeding tour or a 400 years of economic thinking. If you look at some of these discussions about what is productive, what is unproductive, why are we allowing, you know, parts of the financial sector to siphon out too much funds and it's not being reinvested back in. And these arguments coming back basically after each crisis. It kind of requires us to think about where is value creation coming from?

Mariana M: You know it or is there a distinction between value creator and a value extractor? Are there some types of activities that create more value than others? And there's really no answer to that. And what's quite interesting is that it, so I'm going to put up all these nice quotes here, is that it goes back and basically into the history of economic thinking and one of the things I want to argue is that when we no longer have that debate, what is value and how can we make the economy more productive and unproductive, but also through that productive activity actually solve some fundamental societal challenges that we have and I mentioned climate change just being one of them. Then this notion of value in productive versus unproductive can also be captured quite easily and you basically just have different stories about where value creation comes from and I was quite struck in 2009 just one year after the financial crisis.

Mariana M: There's really bold statement they by made by Lloyd Blankfein that the people of Goldman Sachs or the most productive in the world, and I'm going to come back to that later. In other words, that might sound a bit crazy, that statement, but could it be actually that how we account for value in the economy actually allows that statement to be quite irrational. One because we kind of confuse price with value. But that's going to be sort of the punchline we'll come to. But if you think about this word value, we kind of hear it all the time. I've already mentioned the maximization of shareholder value, but we often hear that the silicon valley tech entrepreneurs are value creators in Brexit. I know there was a session this morning and the Jerome Hotel, we were told in the UK we have to at least protect some key sources of where value comes from in the financial services as being somehow quite valuable.

Mariana M: The prices of drugs are talked about in terms of value based pricing. Again, I'm going to come back to some of these later on and the state itself is seen as kind of needed also to redistribute value if we want a more progressive and not regressive type of taxation system. So these words are kind of always out there. Use that kind of, I would say a fuzzy, potentially flaky kind of way. Um, and one of the things I want to argue is that actually all of those different statements are fundamentally, uh, underneath them are stories about where value creation comes from. And it's very easy unless we bring value to the core of how we think about the economy to allow simple stories about value creation to actually pass where value creation, when actually what's happening is, is quite a bit of value extraction. But to differentiate the two, we need to kind of come back to this core idea.

Mariana M: And so when I said 400 years of history, I literally mean that if you look from the 16 hundreds until now, the way that economists thought about value is fundamentally tied also to what was happening in the economy. So it's not surprising that the mercantilist in the 16 hundreds, this was the era of, you know, ships going on from sea to sea. So the 16, 51 navigation acts, they really believed that value occurred through exchange. And that's why they were very worried about trade and getting the exchange rates right. In some ways I would argue in thinking about walls and focusing so much about trade agreements today, we're going back to that kind of mercantilist era. But what happened in the 17 hundreds and the 18 hundreds is that the economist started really looking at production itself. So they didn't focus on trade. So the physiocrats in the 17 hundreds, this was obviously a period of agricultural, uh, economics, sorry, the economy was mainly agricultural and they basically built the first spreadsheet ever, I would argue.

Mariana M: Um, and so they really believed that value came from farm labor. And they were very concerned that the value that was created in agriculture was reinvested back into the economy in order to make the productive system in agriculture and improve. And so they made this very interesting tableau here is called the tableau economies. It was Francois [inaudible] in case they're interested. And they divided this, the economy into three classes, the productive class. And these were the farmers, the proprietors, these were the merchants who were kind of just moving some of the stuff around to sell it. And the stair owl class. Think of kind of the sexual connotation in terms of reproduction, the sterile class where the landlords who basically were seen as just kind of living off the land and being able to charge rent. And there were seen as kind of like fundamentally unproductive to the point of being sterile.

Mariana M: And what they were very concerned about was the degree to which as the money flowed that enough of it was being plowed back in cause you would need some money obviously to sell the goods. But if too much was used for exchange or too much rent was taken out, this system they believed would fall apart. And what the um, class, sorry, the classical economists and these are Adam Smith, David Ricardo and Karl Marx. They were living of course through the industrial revolution. So it's not surprising that they actually believed that industrial labor was the source, the fundamental source of value. They actually came up with the labor theory of value, but all three of them in different ways. What they're really focused on was things like the division of Labor. This is Adam Smith looking at the pin factory, looking at how if one person has to produce the whole pen, then he's only he or she will only, well at the time was mainly he will only produce one pin a day.

Mariana M: And if you actually divided that division of Labor into the 18 different tasks, you could produce up to 5,000 pins a day. And he was very interested in that division of labor and the degree to which would increase productivity growth and surprise, surprise the wealth of nations, which was the title of his great book. Adam Smith was then followed by David Ricardo and Karl Marx some years later. And they were really living through this kind of period of the rise of the machinery of the machines. So David Ricardo in 1821 was already asking, as I mentioned before the question, will the robots take our jobs? He was interested in the degree to which machines would displace labor. Um, and also Labor's wages would fall, unemployment would fall, and what would happen to the system. Karl Marx kind of took that on because he really fundamentally believed that profits came from exploitation of labor.

Mariana M: So the irony he thought was if machines are displacing the source of exploitation, what's going to happen to the capitalist system as a whole? Forget whether they were right or wrong. What was very interesting is that that we're really looking at the kind of objective conditions of production. Who is doing what the division of Labor. They weren't, you know, Karl Marx, for example, wasn't using the word unproductive to be something necessarily bad. He would actually look at the activity that was being conducted literally by say a truck driver where they were driving with defined where they were productive or unproductive. Adam Smith had this very interesting list of, uh, of, of activities that he thought were unproductive and he must have literally gone to the opera, I think the night before. It was three different types of activities happening in the opera that he called unproductive musicians, opera singers, opera dancers.

Mariana M: But what he meant by this is that, you know, obviously there'll be some cultural activities that we all need. They might be unproductive, but we need them for say, cultural reasons, but if we spend too much, um, in those areas that are unproductive than the system won't reproduce itself. And what happens basically with neoclassical economics, which is the economics that we teach all over the world, um, is that the logic fundamentally switched instead of having a whole discussion of where does value come from and using that to determine a theory of price in exchange, they put a lot of emphasis on prices themselves. Again, really superficially, supply and demand curves. I'm sure you've all heard of that. Forming equilibrium prices through individual decisions, maximizing utility for consumers, maximizing profits for companies, maximizing the choice between leisure versus work for workers. And so through this idea that different actors are maximizing their individual decisions, we formed the supply and demand curves into, uh, prices come about and they reveal value.

Mariana M: Okay. Um, and so what happens is first of all, the class struggle kind of disappears overnight. There's no more attention to what is the kind of relationship between profits and wages depending on the actual division of labor and say bargaining power wages are simply the outcomes themselves of this individual decision making. Again, leisure versus work. Um, the other thing is I said price reveals value in already here. You see why it's so easy then for someone like Lloyd blank to say I, you know, we earn a lot. We are very valuable. It is absolutely true that Goldman Sachs wages are very high and if we're using the wage, which is the price of labor to reveal the value of things and we'll give you more examples in a minute, then actually there's some sort of logical consequence to that statement as crazy. It might sound rents. This is very interesting because many people who write about inequality look at rent.

Mariana M: Rent is no longer, I was in the classicals some form of unearned income that stare out class and the physiocrats in the classicals themselves talked about rent is unearned income, but it's kind of the existence of but some sort of imperfection that prevents us from getting a competitive price. Some transient form of monopoly power that can ideally if we've removed those imperfections be competed away. So out goes from the door. This kind of attention to, could it be that some activities because of how they're organized, not just because it's finance or not finance, but how finance has evolved has potentially led to unearned income. Just moving stuff around that kind of view of the problem around rent disappears. Um, this is no longer moving. There we go. And so what I want to argue is that when this debate then of what is valuable, what is not valuable, where does value come from basically disappears because we focus so much on prices and kind of take away the lens of objectively what's happening and don't think of objective way as some sort of deterministic factor.

Mariana M: The, if you, if you read the classicals that were very interested in change and technological change that was constantly happening in their era, but an objective look on who's doing what, where's the division of Labor? For example, if you're looking at the innovation chain, all the different actors that are responsible for innovation, how do they work together across that innovation and how do they together, uh, create value. That kind of attention to production itself is displaced by this attention to prices. And so you know, again, the logic going from price to value, making it very easy to kind of confuse potentially those two. So what I'm going to do now is just kind of say why this matters? Is this just some kind of academic debate? I'm like, okay, fine, whatever. You've just told us this quick synopsis of a 400 Years of value thinking oh and argued that it really matters to a lot of different areas.

Mariana M: And again, forgive me for going quite quickly here, but I'm going to cover quite a lot of ground. The first is how we measure output. And you know, even though GDP was not meant to be used as we're using it today to look at every little percentage point a Kusan, it's warned against doing that. He was one of the founders of the concept a, what we include in GDP is fundamentally what, you know, all the goods and services that actually have legal, uh, prices. This is why if you marry your dog cleaner, um, GDP will go down potentially because that person will still be doing the same job in the house with simply not being paid for it. If you pollute, GDP goes up. Now these things are known, so feminist economists and environmental economists have called on changing how we think about GDP to account for those unpaid say care services at home or to actually measure the value loss from the pollution itself, not just the value gained from cleaning it up for quite some years.

Mariana M: What is less known, and I'm always struck by how few of my economist friends know this, that finance itself wasn't included in GDP up until about 1970 only. For example, those financial services that you played a direct fee for. So if you went to get a mortgage and paid a fee, sorry, I'm very dehydrated cause I'm jetlagged mm. That went into GDP. So the fee to the mortgage provider. But net interest payments wasn't going in. That was literally seen as a transfer of existing income in the same way that social security payments don't go to GDP is just movement of existing income. And so specifically the net interest payments weren't going in. And then because of that finance problem actually called it the banking problem, they saw that these net interest payments were just rising that drastically. There was a group inside the United Nations called the UN systems of national accounting and they said, we've got a problem here, this huge part of the economy.

Mariana M: Again, that first graph that I showed you in the beginning, the rise of finance compared to the rest of the economy, we've got to account for it. So instead of, instead of kind of just pausing and doing the physio crap thing and looking at, well, what form of finance is increasing and what is it exactly doing? Is it productive? Is it unproductive? Should we just pause a minute before we just put into GDP? They just gave it a name. So in national income and product accounting, we need to give a name to the good or service that's being included. So the name to what commercial banks were doing in the name given was financial intermediation. The name of, uh, investment banks was risk taking and just, you know, overnight bang. It goes in. And that was very interesting because it's not, you know, there's no clear cut way how to do this, but the fact that there was almost zero discussion of what form of finance is actually increasing and is their productive versus unproductive side of it.

Mariana M: It should we be careful before you put it into GDP to distinguish the two was basically absent. That discussion was completely absent. Um, to, you know, this whole issue again that Larry Fink raised last night in, which is, you know, a much broader conversation worldwide about some of the limits of just maximizing shareholder value in companies. It's actually backed by a particular theory of value. Um, and if you read Michael Jensen's work in the 1980s, which was taught and Harvard business school and business schools worldwide, the idea is that shareholders are the only ones without a guaranteed rate of return. Literally they're called the residual claimants. If there's anything left over, once everyone else was a guaranteed rate of income is paid, whether it's workers' pay, their salary, uh, banks paid their interest, then they, you know, get the residual, which means that they actually risked the most.

Mariana M: They're the greatest risk takers completely kind of ignoring the fact, and I'll come to this a bit later, and I've talked about it quite a bit in my previous book down to preneurial state, that there's actually a much more collective risk-taking. Workers take risks all the time, but also some of the greatest advances of our time have required the state to take big risks. For example, the intranet was, you know, state funded for every success there's been many failures. So this idea that somehow maximizing shareholder value is rewarding. Those who are also taking the biggest risks and companies because they are the residual claimants, the only ones without a guaranteed rate of return again is very interesting because it kind of shows his complete lack of attention to what's actually happening kind of on the shop floor. This much more collective, a type of risk taking that occurs across different actors and not just shareholders.

Mariana M: And this is interesting simply because you know, you don't need me to tell you that there's some problems with maximizing only shareholder value, but I think it's going to be very hard to change that unless we debunk some of the underlying assumptions behind that kind of proposition. Uh, itself. Um, pricing of medicines is quite extraordinary. So I mean it's actually the best example of value based price, sorry, of have this confusion of price with value. So when in some recent months the price of an antibiotic went up by 400%, the CEO of the company, I think there were a nostrum pharmaceuticals was asked, what are you doing? How can you increase the price of the medicine by 400% overnight? And the answer was we had the moral imperative to allow prices to rise to what the market will bear. Um, so you know how much people are willing to pay and of course you are going to be willing to pay very much if you need it in order to survive.

Mariana M: And what was interesting was not only that, you know, that moral imperative to the shareholders, which I've already mentioned, but also underlying that is this notion of value based pricing, which is a real kind of deformation of the word value. Let me just, sorry. The problem with things like this when they have to wait is that then I can't get to the next slide quickly. Um, this notion of value based pricing, what's interesting is that it again dismisses this much more collective noticed that I keep coming back to this point of value having been created collectively in this particular sector. What's extraordinary is that every year in this country, the US government spends over a, uh, uh, 30 billion anywhere between 30 and 38 billion on drug research. And the fact that the prices of drugs don't reflect at all that collected, right? This isn't saying that big Pharma doesn't invest, of course they do, but that collective value creation is not in the price itself in that you need welfare states around the world to bring down the price.

Mariana M: But the pre distribution price doesn't reflect that value creation is again, very interesting in the way that there's this kind of absence of looking at well, who's actually doing what across that, uh, value chain. Uh, what's also interesting is, you know, this big debate now about the tech companies. What do we do about them? You know, issues around privacy issues around taxation. Just this week we heard that Amazon pays zero taxes in the u s you know, one of the interesting things is I think it's been fueled by this, um, idea. Remember the quotes I had at the beginning, the stories about value creation, um, that wealth is created in places like silicon valley and then gets redistributed to other parts of the world. So to consumers and all sorts of different ways, um, without actually again, debunking the notion of in that case, where has wealth come from?

Mariana M: Are we simply going to react to problems along the way, like privacy or taxing that wealth? Or could we actually redesign the system itself, which better reflected in this case, let's call it digital capitalism platform capitalism, this collective value creation process. So if you think about it, the technology that's used by the Uber's and the googles, you know, Internet gps was funded by the state. The citizens themselves are constantly creating data. Every time you click on an APP, you're creating data. Why is it that we've accepted that that data, which again is, is retrieved with collectively fund a technology and citizens themselves are creating the data? Why does it just go into companies and then we worry about the fact afterwards? So there's a nice experiment happening in Barcelona, actually other cities across the world also in Amsterdam, which in some ways go to the core of kind of rethinking the value proposition behind platform capitalism.

Mariana M: And so what they've done in Barcelona through a project called decode is to think of creative ways to govern that data creation process in new ways. So the city itself houses the data through a publicly governed in public isn't just state, it just means govern in the same way that if you want the UN is governed. So through different stakeholders, the data so that you can improve public transport for example. So citizens, you know, so public value if you wanted to increase through this data creation, which is fundamentally done collectively, I'm in the role of government is interesting because you know so much of what the government does. Um, in, you know, many countries for soul is free. And so the value of public education doesn't go into GDP, but the salaries of the teachers do. So this kind of focus on government, just a spender and not really as an investor or a value creator is really interesting.

Mariana M: Macro economically how it gets accounted for. So it almost be impossible for a teacher to say we are the most productive in the world because we fail to account for, to value the output that they're producing in the public education system. But the other thing is how we train civil servants, and this is kind of become an obsession of mine also in setting up a new master's in public administration in my institute. Um, how we train civil servants has basically been fed by this idea that at best what the state is there to do is fix different types of market failures along the way. It's been interpreted and management schools in terms of new public management, public choice theory where basically to make a long story short, bureaucrats are convinced that, you know, government failure is even worse than market failure. So be careful. Don't occupy too much space, don't do too much because you might get captured and at best define the market failure and try to fix that.

Mariana M: But basically don't try to, you know, dream big Steve jobs is great. Uh, you know, speech to the Stanford graduating classes be hungry. Be Foolish there. You know, if you want to innovate, you cannot be hungry and foolish if you're in a, in the bureaucracy today because of how that training occurs. But a specifically this very static view of what the market is you're seen as just fixing it, not being an active cocreator. So what I did in this previous book was kind of go through the history of silicone valley and show all the public risk taking investments that went into everything that makes your smartphone smart and not stupid. I already mentioned some Internet gps, touchscreen Siri, but the point is not to say state versus business, but why is it that, you know, I mentioned this the other night, uh, that 700 page book by Walter Isaacson on Steve Jobs, fantastic book.

Mariana M: There's not one page, one paragraph, one sentence, one little word on any of the public investments that went into any of the eye products, iPhone and iPad. And in fact they would be stupid product's not smart products without those public investments. But this lack of attention again to the objective conditions of production. Who's doing what in this collective division of labor kind of allows for this mystification to happen. So what do you know? Are we just going to say, Oh God, that sucks. Yeah. What are we going to do to actually improve things? I'm going to do this quite quickly. Unfortunately, someone's head is on the timer. There you go. Thank you. Um, so what to do, first of all, I've repeated this now enough, so I'm sure you, uh, this won't surprise you. We really need a way to talk about value in terms of stakeholder governance, values collectively produced.

Mariana M: I've talked about the state, talked about workers, but also really looking at different types of sectors and really trying to identify could there be ways to also make things more productive by not allowing so many funds also to be siphoned out, whether it be by share buybacks or the financial sector, which kind of isn't doing its job because it's just financing finance, um, organizations, all organizations, not just business organizations need to rethink their purpose, but also really invest in those dynamic capabilities which allow you to be a value creator. It's really striking how in government there's been massive outsourcing of investment in house in its capacity because of this massive drive to outsource knowledge. I found this even in places like NASA, there's been lots of outsourcing and this fundamentally makes it really hard for you also to continue to be a value creator. So it kind of becomes a self fulfilling prophecy if we don't have ways to account for value created across a much wider spectrum of actors in the economy besides just business surprise, surprise.

Mariana M: Those actors also become less and less able to do so because we don't think of those really interesting things like strategic management, decision sciences, organizational behavior, which taught managers learn across the world. Um, uh, this whole issue that we really need to stop confusing the word market with business markets are outcomes of how business government, third sector institutions come about. And if we do want a greener form of capitalism, it's not gonna happen by leveling the playing field. It's going to happen by tilting the playing field, not by choosing one company, one sector of certain set of actors, but really making that choice of tilting the playing field towards a green transition. And we'll come into, um, some examples of how to do this in just a minute, but this idea that, you know, market's kind of just come about by profit maximization. It would be impossible to understand the history of the Internet biotech nanotech if we thought that that was just by leveling the playing field, there was very concrete choices made that made that happen, including the moonshot.

Mariana M: No, this is stuck. Is it someone in the back make this, go on. There you go. Um, this whole notion of the production boundary, it's quite a nice, I think, emphasis to come back, you know, actually understanding that there is this productive and unproductive sphere, but instead of making a list of, you know, big, bad hedge funds, great industry, how can we start steering through actually tilting the playing field, for example, through taxation activities back into the production boundary. I was really struck in the u s in the 1970s it was actually the national venture capital association that had just formed that lobbied very successfully, very quickly government to reduce capital gains tax by 50% in just four years. And that actually increased the um, short term ism of the whole kind of broadly defined private equity space. But the fact that actually vcs where then following, you know, large pots of public finance for example, of the National Institutes of health kind of, you know, it, that was dismissed completely in that story telling of where wealth comes from.

Mariana M: And you know, by steering it's not, you know, VC is actually very important. Venture capitalists are very important but the fact that they are so exit driven, want to exit in three to five years through a buyout or an IPO has in many different sectors created a rush to exit. So in biotech there's lots of placebos, product lists, ips. And that's fundamentally not because VC is bad or good, but we've allowed a certain form of venture capital to exist and kind of re steering venture capital to be more productive and less unproductive or steering the evolution of intellectual property rights to be less abused because we currently have, uh, patents that are too wide. They're too strong there to upstream. That's not about saying we are pro or against patents, but how can we fundamentally redesign the patent system in order to have more productive entrepreneurship and on productive entrepreneurship.

Mariana M: There's all sorts of ways that we could also reform finance to, you know, be more long term. Uh, it's amazing. We don't have a financial transaction tax. It's not rocket science. So that would help fuel long term ism. Um, we need to really confront this issue of d financial Ising the real economy and make it as central to the debate about the future of work as the current debate is around the robots, which as I've already mentioned, have, oh, is displaced labor, but we need that reinvestment back into skills. Production skills don't only happen through training programs in governments. They have been historically and outcome also have business investment and the whole issue of drugs really, uh, you know, prices of drugs. I reflected on this quite a bit in my talk two days ago, so I won't talk much more about that, but come on, prices should obviously reflect that collective contribution.

Mariana M: What I want to talk about now, my last kind of minute, cause I want to have at least some questions is this notion of purpose coming back to it because I began with it. What would purpose look like if it was really shared that agenda across these different actors, these collective value creators that I keep talking about. And I've had a real, um, privilege not only of being able to set up a whole department around this concept at UCL called the Institute for Innovation, public purpose. Um, and also along the way try to change the narrative, the vocabulary we're using in the public sphere. But I was given the opportunity in the European Commission to write a report, which was then voted on by the parliament. So the outcomes of the report have now changed the law and what's called the horizon program, which is 100 billion euros for innovation funding around this concept of purpose.

Mariana M: The idea was stopped just kind of dispersing money around just to categories like small companies, SMEs or particular sectors. Really think through the kind of moonshot approach, which really required public purpose in both the public and the private. So getting to the moon requires lots of different sectors to invest and innovate. It required government to change how it was interacting. So redesigning procurement and price schemes to really fuel the bottom up projects. And so thinking about moonshots around the Sdgs, you know, starting with the challenges, turning them into missions, getting cross sectoral in the private sphere and investment in innovation, but also making all these subsidies and investments that the private sector gets from business, sorry, from government, conditional on reinvestment of profits but also towards societal goals, purpose. And so the example would be, you know, as the clean oceans I think is SDG 13 or 14, I can't remember making it much more specific that the plastic out and a limited amount of time, all the different sectors from marine to AI, chemical, social innovation design that would be needed, bring lots of different sectors together to think that through.

Mariana M: Um, and again use governments tools, tentacles, procurement prize grants and loans to fuel activity towards actually achieving, uh, socially, um, set goal. Um, and also, you know, precisely because this requires lots of different types of actors sharing not only the risks but also the rewards. This is something that's really missing. I often give the example of Tesla and Cylindra. Everyone knows that Solyndra was funded by the public sector because when it went bust, the taxpayer was asked to bail them out. But at the same amount of money, 500 million was given to Tesla. And the idea that we just socialize the risks and not their rewards is, you know, in the end, you know, it's not out of fairness. It has to be done in reflection of also where that value came from in the first place. Obama, by the way, told Tesla, if you don't pay back the loan, we get 3 million shares in your company and why you would want 3 million shares and a crappy company that doesn't pay back its loan is kind of beyond me.

Mariana M: How do you said we get 3 million shares? If you pay it back, the price per share from nine from 2009 to 2013 went from nine to 90 that would have more than paid back the cylinder loss and the next round. But that kind of thinking requires rethinking the role of government, not just a spender, regulator, administer d, risker, enabler, facilitator, all these really boring words, but active risk taker, cocreator a value investor, first resort, not just lender of last resort. So this is why narratives and stories really, really matter. There's also other ways to do this, you know, redesigning IPR, making sure that prices are reflecting. I've already mentioned many of these. Um, I will stop now cause I want to make sure we get some questions and I see we have seven and a half minutes. Um, but the last chapter of my book is the economics of hope. And I do think, you know, there's lots of hope out there. Just the fact we have, as I already mentioned, SDG 17 of them with 169 targets below them is amazing. The fact there's this call for purpose. Fantastic. But to get real, we fundamentally need to rethink where does value come from. Thank you.

Speaker 2: [inaudible]

Mariana M: so am I calling on people? Yeah, I don't see anyone. Okay. So I think there's a roaming mic.

Mariana M: Uh, do your concepts of the evolution of value have relevance to what's going on in China and the explosion of their code? Should I take a couple at the same time or, or just one? Okay. So what's interesting in China, I mean, my view of what's happening in China is China's learning the lesson of Silicon Valley at the same time that the current president of the United States is unlearning it. So the first thing Trump did, um, during his presidency was go after art by E. I don't know if you remember, it's actually one of the first things he did. I think it was the first week in office. So you know what China currently is doing? Is it spending one point $7 trillion? That's 12 zeros just in case people forgot. I sometimes forget and I'm Italian and to say trilling it to say [inaudible] at the end, it kind of sounds like puppet and off, I bet on it.

Mariana M: So lots of money, one point $7 trillion on basically greening its entire economy. That really fundamentally, you know, first of all, this is out of urgency and it's really interesting how missions or especially easy when there's a war, right? So this is why when there's wars we never asked, where does the money come from? We just kind of fun the stuff that needs to be done. The moonshot was fun to, no one really asks how much is it going to cost a but China's urgent pollution process. Uh, problem is fundamentally, you know, the reason why it's spending so much money on that. But if you look at how they're doing it, it really is across the entire economy. So it's not just about renewable energy. Um, and you know what's also interesting in China is they have different forms of corporate governance. So Huawei very much in the news is a cooperative.

Mariana M: It's not just, you know, they also have classic state on enterprises in China and some other companies in China are going actually slowly to the shareholder model. But you know, they, it's interesting to me. I'll ask a question more than answer your question. It's interesting to me whether China will not only learn the lessons about investment, but what I wrote about for example, in the dissent in the entrepreneurial state where I looked at the value created and silicon valley was that there was this decentralized network of different value creating public institutions. When you just have one big fund like the Chinese Development Bank, which is giving out loans close to say between five and 9 billion to companies. A quick question that comes is, is that going to prevent it from actually fueling the kind of knowledge based economy type of growth that we know is required in modern day capitalism?

Mariana M: Because it's just big pots of money that very quickly become in Marshall. By the way, that amount of money is the same amount. I said five to 9 billion, 5 billion is what Elon Musk got from Uncle Sam for the combination of his three companies, Tesla, solar city and space x. Um, but where these, where these monies come from really matter, we know that with the private sector. So there's a whole discussion about how to design a company but within public organizations of the Darpa, which you know, funded the Internet, what do we know about Darpa? How does it work? How does this HR system work? How did they welcome the kind of risk taking that they did? This question is actually happening in China when they're setting up new forms of institutions. And that for me is just a big question. Um, you know, what kind of lessons are being learned, not just in the history of economic thought, but in the varieties of capitalism that we see and the dismissing of the public sector as an active cocreator of value has meant that we have lost the opportunity to really understand which public organizations work, which don't.

Mariana M: Quick example, public banks are all over the world. Some are really ambitious, active co-investors are the ones just give out subsidies and guarantees like the one in my country in Italy, which creates a very parasitic kind of public private partnership. So how to get that real coinvestment towards solving societal challenges fundamentally also is determined by how you organize that entity itself.

Speaker 2: Gary.

Speaker 3: Excellent. Um, I've been a venture capitalist for a 30 something years and um, I'm wondering whether you view the things I've been doing as a productive, unproductive, parasitic, um, et cetera. And in particular, um, to the extent that companies are involved in information which isn't really counted so much and, uh, in our economy, uh, improving the efficiency of markets and so forth. How do, how do you view those types of companies?

Mariana M: Okay. So as, as you're a funder of the Aspen Institute, I'm not allowed to call you a parasite, but you're obviously not. No. So I don't think that way. I don't think about like it's VC. Good. Is it bad? That was kind of the joke I was mentioning with Adam Smith. He kind of just literally met a less productive on productive, and I don't know if you saw the list, but basically everyone in this room was unproductive. You know, it had a men and women of letters. So any professors in the room, uh, lawyers and doctors unproductive, right? So that's kind of very static view. Good and bad. In his case, he wasn't actually saying that. He was just like, there's these activities, let's be careful how much we're spending on them because they're not actually productive. What I, what I've been mentioning, what I say steer activities back into the production boundary is that organizations and their activities can fundamentally be redesigned.

Mariana M: You know, when I say Matt markets are outcomes, it depends outcomes of what, of how we designed the organizations and their interrelationships. Personally, I think a lots of the lobbying that's been death done and I just gave one example by the VC industry, but also, I mean the large pharmaceutical companies have done huge amounts of lobbying on taxation, has not helped get a more productive form of capitalism. There's very different types of venture capitalists. I'm kind of look more like basically just private equity and are short term. Those longterm vcs are, I would argue more productive. But what's really interesting is there isn't really a fora. I don't hear the longterm VC guys or Gals, uh, coming to the fore when countries around the, for example, after the financial crisis were like, what are we going to do? You know, what are we going to do to increase growth?

Mariana M: There isn't really a collective form in the business community, let alone in the VC community that are like, all right, well what you really need to do is, you know, don't do austerity. That ain't going to get you growth. You need mission-oriented strategic long term investments, which then crowded, for example, the venture capitalists and the tech community because that's exactly what happened in nanotech and biotech and cleantech. I have some interesting data on clean tech in this area. The state when it actually is mission oriented, strategic organized in the Darpa kind of way can do wonders for producing longterm growth because it catalyzes an investment in the business community. If there isn't that voice and all we hear us, you know, reduce capital gains, uh, uh, you know, and, and not debating the really dysfunctional use of patents. As I've already mentioned, patents are way too upstream.

Mariana M: So the tools for research or being patented, they're too wide, so they're being abused. Um, for strategic reasons. If we don't have business itself arguing for a more productive form of capitalism, it's not surprising then that you get kind of this race to the bottom in moments where countries are kind of desperate for growth, for growth's sake. Um, yeah, I mean, so for me the question is not, is VC parasitic or on parasitic? It's, I think it should stop actually lobbying for some pretty parasitic policies, uh, but also lobby for the need for more long term venture capital funding, which I think you yourself are interested in. Uh, but the reason that voice, you know, and I think you would agree that a lot, I mean, VC in biotech really did screw things up quite big. Uh, by kind of rushing a science based industry, exit driven finance is not good for science based industries. You need patient longterm committed finance even in the death valley phase. Other questions? Come on. Yes.

Speaker 2: Hello

Speaker 3: Sedan. Yes. Anyway, thank you for this very vibrant discussion. You just briefly touched about climate and the question of climate control investment innovation except that and the economics for the earth. We have 12 years left. I'm hesitant. Uh, Ronald Reagan once said, considering the issue with Fluor carbon powered and the ozone all, he said, you know, I don't think I really quite believe in it, but it's like an insurance policy. And so with that in mind, the whole closed far faster than scientists ever thought. So you know, investments in these kind of things don't always look good on the bottom line. So how do we move the needle to 12 years left for our future, for our children? It's really nice that we all make. But what's the money going to a debt you, you know, in 1220 years for our children. Any ideas?

Mariana M: Okay. So normally I talk too much about climate change. So I apologize if I went overboard and spoke about it too little. I talked about it in the beginning and then kind of made reference to the fact that we should be really treating climate problems as concrete missions and not just talking about climate change, blah, blah blah as a challenge, but turned it into concrete missions. And what we've been doing through my institute is helping cities in different regions around the world around that. So for example, industrial strategy, which often has a big pot of money is often just kind of sectors, you know, formulating different sectors that are going to get support. We're saying any sort of climate related mission requires all your sectors to invest and change their current kind of way of doing things. So in Germany, this happened recently where the energy vendor mission required, you know, the steel sector to lower its material content through repurpose, reuse and recycle.

Mariana M: And that kind of economy wide green transition is I think what we really need to be focusing on when we talk about climate. It's too easy just to focus on renewable energy. And just to give you an idea of how important that is. When we had mass production, you know, big revolution and kind of how we produce stuff basically a hundred years ago without suburbanization, which was, you know, a big change in lifestyles, mass production would not have fueled the kind of growth that it did and change as a production distribution and consumption and productivity across many different sectors across the globe. It required that demand side pull. So people like all these mass produced products, cars, washing machines, etc. Uh, we're, we're fueled. The purchase of those was fueled the market. The scaling up of that, of those products was fueled by the fact that people were increasingly living in the suburbs.

Mariana M: And what we should be thinking about is what's an equivalent, you know, demand side set of policies around green. So green policies that become the funnel, the pole, not the, not just the push through investing in renewable energy, which I showed you there, we're not even doing that enough. But the pool on change in lifestyles and transformation of all these different sectors so that green becomes the equivalent of suburbanization. But for lots of the current technological revolutions of our day. So the, you know, the computational revolution, the ICT revolution, there's often a joke. So Robert Solo and Robert Gordon, two famous economist often put up the toilet here, indoor toilet in the Internet there. And they say, if you had to get rid of one, which one? You know, so the idea being that electrification has had such a bigger effect on our economy than say the Internet has.

Mariana M: But that's an unfair comparison because what electrification had with so much bolder set of demand side policies, which the ICT revolution hasn't had. And using green to not only fuel a green transition in terms of going away from false sole towards renewable energy, but to really think through very concrete demand side policies, which even allow the ICT revolution to have a new funnel becomes again that kind of more ambitious level policies and that is what China's doing. Coming back to the earlier question, they're looking at energy friendly technologies and also using that idea to transform how they're doing it. But you know, the missions that we're working on with cities, if you look at the green ones, they literally require transformation of nutrition, of transport, of course renewable energy. We worked also with the um, setting up new public banks and the idea was don't set up a public bank just to hand out more money to whoever is asking for it loudest.

Mariana M: Really make it conditional on any organization that wants that patient. Long term finance at a public bank provides to be conditional on those organizations, you know, greening themselves. Um, and that whole conditionality of the public sector is kind of a new way to think. And Bell Labs. I'll just finish with this. Bell Labs, a very innovative r and d laboratory in the private sector in at t and t many decades ago would not have happened without government. Insisting that we take to retain the monopoly status at at and t had had had to reinvest its profits back in the economy, in innovation and big innovation beyond telecoms and that kind of conditionality on reinvesting profits not only back into the economy, but into areas that matter to solve our big urgency around climate. Why not

Speaker 2: [inaudible].