Transcript

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Markus Brunnermeier: So nice that you're with us and welcome back to everybody to another webinar organized by Princeton for everyone worldwide. We're very happy to have Thomas Piketty with us from the Paris School of Economics. Hi Thomas.

Thomas Piketty: Hello.

Markus Brunnermeier: Thomas will talk about a brief history of equality and we will learn whether it will be the same talk if it were a brief history of inequality. So let me start perhaps with a long history of inequality. So I have a figure here from Guido Alfani which shows how the fraction of wealth held by the richest 10% of the population in Europe changed over the centuries. So it started in 1300 and of course the Black Death led to a decline of inequality and then it was constantly rising and then the Great Depression led to a large decline and then first state arrangements and since the 1980s we have an increase in the inequality again. The next thing, of course, there's a question about wealth inequality. There's a lot of talk about how since the '80s the interest rate is declining and there are various explanations why the interest rates are declining and the question is also what are the implications then if the interest rate is declining for the wealth inequality. So I have a little example here, there are two groups: there's the rich and for the rich, they have actually when they invest they have a cash flow which grows at a rate g upper bar, while the poor when they invest they only get a growth rate of the cash flow with g lower bar. So the rich have better investment opportunities and if I just use the Gordon growth formula this way and look at the value of the wealth, evaluated at the current price even though the cash flow is the same with the same interest, the value of the cash was just given by the Gordon growth formula, and if you look at the wealth ratio the rich where there's the rich and the poor, it gives you this formula. And as the interest rate goes down from this level to this, on the x-axis I have the interest rate, the wealth ratio is actually then growing up very, very significantly. So the decline in the interest rate alone would actually lead to, in this simple example, to an increase in wealth inequality. Of course, wealth inequality is only one form of inequality. There's income inequality, consumption inequality, wealth inequality – as we talked about - social mobility, which is a more dynamic measure, who is rich, who is poor, is changing back and forth. And there's also the resilience inequality. There might be different people. If they're hit by a shock, they might be able to bounce back, and others might not be able to bounce back. So there's a difference in ability to bounce back after a shock that might actually translate in different income and ultimately in different wealth. So thanks again to all of you for answering the poll questions. So here are the poll questions, and here are your answers. So the first answer is, should equality be a social objective on its own, even if it's at the cost of a Pareto worsening or not. And people said, 63% said yes. So even if, you know, we can have better equality, and everybody might be worse off, it's actually still desirable, 63% said this. 37% said no. So that's a very strong endorsement of equality. And then the guestion is, which inequality should be ranked highest? Income, consumption, wealth, opportunity inequality, social mobility, or resilience inequality? The answers were that income inequality is 13%. Consumption

inequality, 4%. Wealth inequality, 18%. And opportunity inequality is 48%. So by far the biggest number of people said opportunity inequality is the worst.

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Social mobility is 16%. So it ranks above income inequality, slightly below wealth inequality. And resilience inequality only gets the 1%. So which inequality is more important? The top 1% or is it some Gini coefficient that's 39% thought the top 1%, Gini coefficient was 61%. And should we treat the policy differently whether the wealth is generated by self-made wealth or inherited wealth? 19% thought it should be created a distinction should be drawn self-made or inherited 19% self-made, and 81% inherited wealth. Then the question was you know once you have this wealth inequality it might also lead to philanthropy is philanthropy a very effective measure also deal with inequality or not or is it much more the tax redistribution and philanthropy is very effective thought 6% only; not effective was 56%; and there might be an optimal mix 38%. So philanthropy itself is not really an excuse for wealth inequality so with these answers to the poll questions I will pause on the mic to Thomas, who will tell us a brief history of equality, and we will learn everything about equality, what he has done over several decades now in his research. Thanks, Thomas.

Thomas Piketty: Thank you, thank you, Markus. I'm not sure I understood the sampling for the polls came from the people listening to your webinar.

Markus Brunnermeier: They're listening at the moment, yes.

Thomas Piketty: Oh, listening at the moment, yeah, yeah, okay, okay, okay. That's interesting, very interesting. Okay, so let me share my screen. I think it's okay. Can you see this? Okay, that's good. So this is the topic of the talk today. So basically, I'm going to summarize, present to you some of the findings which you will find in this book, A Brief History of Equality, that was published by Harvard University Press, I guess, last year, or actually the year before, in 2022. So I strongly recommend this book. This is a very short book, like my other book, and I really think it's also a better book, in a way, a clearer book. At least I'm trying to make progress, respond to discussion, and still a lot of progress to make. But anyway, at this stage, I will recommend, if you want to have a sense of what I am up to, to read this book. So this will be a summary of this book. I will also present some findings from the World Inequality Report 2022, which you will find online, the full version, very easily, and some data from the World Inequality Database, which is very collective research. This is the outcome of a very collective research program involving now more than 200 researchers from all over the world, trying to combine all the different data sources we have to measure inequality of income, inequality of wealth, and now also gender inequality, inequality of income of carbon emissions. So basically, we combine household surveys, tax data, national accounts, wealth rankings, all these different data sources, and try to put them together in the most consistent manner. All the computer codes are online. Everything is online. Is this perfect? No. Can this be improved? Yes. Can you help us? Yes. Please go online, look at the computer code, make suggestions to improve, participate if you know new data sources for a different country. So this is really ongoing work. This is not

supposed to be perfect. I think this is better than what we had five years ago, 10 years ago, 20 years ago. So we are making progress.

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But there's still a lack of transparency, generally speaking, about income and wealth distribution, which I would certainly like to have better data sources. Anyway, let's start with a little world tour of what we know about inequality. So, let's start with a simple indicator, which is a share of national income going to the top 10%. So just to get the order of magnitude, we are talking about 10% of the population. So, if we were in a world of complete equality, they should have 10% of total income. If we had complete inequality, they should have 100%. So, of course, the real world is always in between. But what I want to stress here is two main findings. First, it varies a lot. So, basically, it can go from – so, it doesn't grow from 10 to 100, but it goes from 20-25 to 70. So, you know, the most equal country in the world is going to be, you know, Sweden or Norway, where it's going to be, say, 25. This is before tax, after tax. So, this takes into account monetary transfers, like pension and employment insurance, but income transfers are not there. If we were to look, we also have the series online after tax, after all in-kind transfer, then the top 10% share in Sweden and Norway will go down to 20-25%. Before tax, it will be more than 25-30%. So these are the most equal countries in the world. The most unequal country, according to our database right now, will be South Africa, where it will be 70% of the total national income going to the top 10%. In Brazil or in Mexico, it will be like 60% or a bit more. Generally speaking, inequality tends to be higher in the South than in the North. So which countries are more equal? So that's maybe finding number one. You have a lot of variation in which countries are more equal. Finding number two is that these things are not frozen. So it's not that Europe has always been more equal. Actually, even the U.S., which is more equal than Europe, looks relatively equal as compared to South Africa, or Brazil, or India, or Saudi Arabia. But it's not always been like that. So in fact, in particular, Europe used to be very unequal up until World War I in the 19th century. So Europe in 1910, it was not like South Africa today, but it was close to Brazil in terms of top 10% income share. It was 50%, 60% of total income going to the top 10%. And it has been divided by two over the course of the 20th century, and now it's more like 25%. And what I will argue, and what I argue in my book, in my brief history of equality, is that this long run movement toward more equality. So when I say long run, I mean over the course of the 19th and mostly 20th century. So I'm not talking about the Middle Ages of Guido Alfani that you showed us before. When I talk about a long run movement toward equality, I really talk about the past 100, 150 years, or 200 years to some extent, but that's what I mean by the long run. So rich countries have become more equal through a change in institution, through the rise of social security, progressive taxation. And this process that has made them more equal, in particular through more inclusive social investment, investment in education, is also the process that has made them more prosperous. Or at least this is what I argue in this book. So that's very striking with this first indicator, top 10% share. Maybe an even more interesting indicator is the bottom 50% share. So you know, Markus, in your presentation, you were asking people, do you prefer the top 1%? Do you prefer the Gini? In fact, what I would prefer myself would be more of this bottom 50% share and top 10% share so that we have a very concrete view of what more living individuals are getting. The problem

with the top 1% is that it is the only top 1%, the problem with Gini is that it is very abstract, you don't see what it is for concrete individuals. Look at this indicator, the bottom 50%, which can be quite meaningful.

12:16

This is 50% of the population, this is significant. So this is 50% of the population, so by construction, if they live in a world of complete equality, they should have 50% of total income; if they live in a world of complete inequality, they should have 0%. Real world, of course, is always in between. It varies quite a lot. In a country like South Africa, it is going to be 5% of the total income for the bottom 50%. In Nordic Europe, it is going to be 25-30%, or maybe a bit more than 30% after all in-kind transfers. When you are the bottom 50%, and you have 25% of total income, of course you are poorer than average, by definition, you know, after all, you are the bottom 50%. But it means that your average income is about half of the average income of the society in which you live. So, you know, you are poorer than average, but you're not hugely poorer than average. Whereas when you have 5% of total income as the bottom 50%, you know, it means your average income is one-tenth of average income. So you are really very, very far from the average, not to mention, you know, very, very far from the very top. So, you know, what this shows, again, is that the distribution matters a lot, because, you know, if you only look at macro aggregates, you know, average national income per capita, average GDP per capita, you know, you're missing a lot, because for the same average GDP per capita, you know, the average income of the bottom 50% can basically vary by a factor of one to five, you know, depending on whether you have 5% or 25% of total income. So, you know, if you only look at macro aggregates, you know, you're missing a lot, because for the same average GDP per capita, you know, the average income of the bottom 50% can basically vary by a factor of one to five, depending on whether you have 5% or 25% of total income. for the bottom 50 percent. So, bottom line, the distribution matters a lot. If you care about basic poverty, if you care about basic capabilities, access to food, housing, culture, everything you care about. So, you know, that's sort of the broad view. Distribution varies a lot. Rich countries tend to be more equal, but they've not always been more equal. They have become more equal, and the fact that they have become more equal has come together with the fact that they have become richer and more prosperous. So, that's the general idea of the book. Now, this is clear.

Markus Brunnermeier: It could also be that if we go into transmission, generally, it's the first country to grow. Few people become very wealthy, and then it spreads subsequently to the rest. Is it clear that, you know, the causality goes from equality to more growth, the connection between growth and inequality?

Thomas Piketty: No, I mean, it could go in all directions, but now in practice, so I will come back historically, if we want to understand how this happened, you know, what I will argue is that this happens through specific change in institution, a rise of social spending, education, progressive taxation, and this is facilitated, in particular for broad-based investment in education, the rise of productivity. Let me return to this in a minute. This is for income inequality, where there's been a lot of progress, both in average income and relatively more equal distribution in the long run, at

least in rich countries. Now, when it comes to the distribution of wealth, here this is a simple graph coming from the World Inequality Report 2022.

15:52

You can see that, you know, the progress in terms of wealth equality or spreading the wealth, if you want, has been made much more limited than for income distribution. So if you look at Europe today, this is again the most equal region, but still it's very unequal. So if you look at the bottom 50% share in net wealth, net household wealth, this is going to be about 5% or 4% of total wealth in Europe going to the bottom 50%. Okay, 4%: that's more than in Latin America, where it's only 1%. But it's still very small for the bottom 50%. And so we will come back to the historical evolution of this. We will see that there has been some equalization of wealth as well. In particular, if you look at this middle 40% group in Europe today, the people who are not in the top 10, not in the bottom 50, they have a significant fraction of the wealth today, which was not the case 100 years ago. So there's also been a movement toward more equality for wealth, but it's been more limited than for income. And we will try to understand why, and we will discuss whether this could change in the future, and whether it's desirable or not, and how we can do that. In the World Inequality Report 2022 and the World Inequality Database, there's a lot more data, in particular, on gender inequality. So here, it's a simple indicator of the share of total labor income going to women, both wage labor income and self-employment labor income. You can see there's been an improvement in most regions in the share going to women, although not everywhere. In China, there's actually been a decline. But even when you have an improvement in Western Europe or North America, we are still very, very far from gender parity. So this is discussed in the World Inequality Report. I'd be happy to answer-

Markus Brunnermeier: Just to make sure I understand these numbers, a woman is not working. It's also counted here. No, it's counted as zero income. Is this correct?

Thomas Piketty: This is the share of women in total labor income. So if women have zero, if all women have zero, yes, their share will be zero. So why do we look at 50% as gender parity? Because when you look at labor time in time use surveys, including, of course, domestic labor time, women actually provide more than 50% of total labor time everywhere, if you include domestic labor. So you would think that 50% of income and control over resources could be a desirable target after all. And the point is that we are very far from that.

Markus Brunnermeier: But the Claudia Goldin result that women prefer to devote more time to the family, at least you see in the data, that would tend to something smaller than 50% in the labor share.

Thomas Piketty: I'm sorry, I did not understand exactly what you're saying.

Markus Brunnermeier: So like Claudia Golden's research, where she shows that women tend to prefer to be less career focused, so they're more family focused. And that explains, to some extent, the lower wage rate for women. It also would lower this 50 parity aim.

Thomas Piketty: No, you're saying maybe they tend to prefer domestic labor over working in firms.

19:42

Well, first, I'm not sure this is true, but in any case, even if they did prefer domestic labor over market labor, this is not a reason to have unpaid labor, you know. So that's my part. You know, this can be discussed, of course, as well. Last dimension of inequality, which is quite important in our work, is the inequality in carbon emissions, which is quite important, because when we just compare country averages, we are missing a lot of the action. And here, the bottom line is that inequality within countries or within regions of the world are very important and are as important as inequality between countries. So if you take, again, the example of Europe, which is the country which had a bigger reduction in emissions than North America, as we all know, still, you have enormous variation. So if you look at the bottom 50% of European households, they have five tons. That's including the carbon content of imports. This is too much, but this is sort of, this should go toward the four or three or two, but this is not completely out of line with the long-term objective of getting to two. The problem is that in the top 10, you have almost 30 tons. If you are looking at the top one, you will get 70, 80 tons. In the US and North America, you already have 70 tons for the top 10. So it's going to be difficult to explain to people at the bottom that they need to reduce their carbon emission if you don't start by having a drastic reduction at the top. Otherwise, you will end up with a gigantic yellow vest movement everywhere. So here, the bottom line is that if you don't have a drastic reduction of inequality, it's going to be difficult to reduce emission at the same time. Okay, now let me get back to the historical perspective of how some of this transformation has happened. So this is coming from this book. I mean, if you have a lot of interest in the history of inequality, you can also read these other books of mine. But, you know, each of these three books is about 1,000 pages long. So, you really need to have a lot of time and to be very motivated. I don't ask you to be so motivated. So, if you have a limited time, we all have a lot of things to do. I recommend you read this one, which is 200 pages long, 250 pages long. You know, you can read it in a weekend. And I think it's a sort of synthesis of what I have been finding in the past. And it's also maybe a clearer book and maybe a more optimistic book in the sense that I try to stress, you know, the positive evolution of the past and how they came about. And, you know, you can always say, you know, there's too much inequality. And in some way, you know, this is true. But, you know, here I want to stress the positive evolution toward more equality, which I think in the past has been a huge historical success. And I think it's important to start from that. So, I'm not going to present everything in the book, let me try to focus on a few big historical evolutions. So first, regarding income inequality. So here, this is data for France, but this is quite representative of what we have in Western Europe in general. And so this is what I was showing you with the world map before. In the long run, the share going to the top 10% used to be between 50% and 60% in the 19th century. It's now 30%, 35%. In Sweden, it will be 25%, 30%. And if you look after tax, after all income transfer, it will be as small as 20%, 25%. So as compared to over 50% before World War I, it's a very substantial long run reduction of inequality. And I will argue this has been a very positive transformation in the long run. The share going to the bottom 50%

percent and the middle 40 percent has increased a lot in the long run. Now that's for income inequality.

24:07

Now if you look at exactly the same graph for wealth inequality, this is what you get. So again this is for France where we have pretty good historical data on wealth and inheritance in particular, but we have similarly good data for Sweden, to some extent for Britain, to a lesser extent for Germany, but anyway for every European country where we have good historical data we get almost exactly the same kind of numbers. And the bottom line is that in the long run, there's been a compression of inequality, you know, in the sense that the top 10 percent share, you know, used to be 80 to 90 percent of total wealth. It is now between 50 and 60 percent, so it's a very substantial reduction of inequality, but there's still a lot of inequality. If you look at the situation today, the bottom 50% share in a country like France is going to be 6%. That's more than in the 19th century where it was 1 to 2%. So it's a lot more in a way. But for 50% of the population, it's really very small. Let me make clear that this is not due to an age effect. So if you look within the group of people say 20 to 35, 35 to 60, above 60, it will be almost exactly the same number. So in particular, the bottom 50% share is always less than 10% and usually around 5% within each age group. So this distribution also looks a lot like the distribution of inherited wealth. So if you look at the new generation and who is receiving wealth from the previous generation, this is roughly what you have. Now there has been some improvements in the long run in the sense that we now have what I call a patrimonial middle class, which did not exist before. What I mean here by the patrimonial middle class is a group of 40% who are between the top 10% and the bottom 50%. Today, they have about 40% of total private household wealth in a country like France and in most European countries. In the U.S., it used to be almost 40%, 20-30 years ago, now it is about 30%, but it is still more than it was in the 19th century when it was 10-20%. If you are the 40% of your country and you have about 40% of total private wealth, it means that on average you have roughly the average wealth of your country. In Western Europe today, the average wealth per adult is going to be somewhere around 200,000 euros, 200, 250. So, we are talking of people, you know, this middle 40%. These are people who have anywhere between 100, 200, 300, maybe 400,000 euros in net wealth. That's roughly the range of people we are talking about. And so, these are people typically they would own their home or they would own a little business. And so, this is a patrimonial middle class. So, these are people, you know, who are not enormously rich, you know, maybe from the point of view of a billionaire, you know, whether you have 200 or 0 is almost the same thing. But in fact, it is very different from 0. Because, you know, when you have 100 or 200 or 300 in wealth, you know, it means you have a kind of economic security. So, it's much more than money. You know, it's also sort of your bargaining power vis-a-vis your own life and vis-a-vis the rest of society. You have the possibility to: you can set up a little business, you can buy a home for your family so that you don't need to pay your rent every month. So, you know, I think in the long run, this rise of a patrimonial middle class, which did not really exist in the 19th century, has been a very positive development because it has allowed, especially, you know, after World War II, the emergence of this patrimonial middle class that has come with having a broader groups in the population with more economic security, being able to build

homes or start up businesses. So, you know, that's a very positive transformation. So we see also for wealth, a long run evolution toward more diffusion of wealth.

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But, you know, it's still limited in the sense that, you know, again the bottom 50% has very little. And so what I'm going to be asking for, you know,

Markus Brunnermeier: Can I ask a few questions? For the top 10%, you see that from the 1980 onwards, it's gone up a little bit. Would this be due to a decline in the interest rate environment, essentially that the discounting and hence there will be wealth effects purely from the fact that the interest rate is going down?

Thomas Piketty: Yeah, well, just in the 80s, interest rates were actually quite high at the beginning of the 80s, but I don't think we have to look at all the rates of return on different forms of assets, the evolution of income inequality itself. I think the primary explanation for the rebound of inequality in the 80s, 90s comes from the income side and the income inequality side. So, the income inequality has started to increase a little bit again. So, what you see for wealth as a first-order approximation is just a translation of this. Now, you can also certainly have some inequality in the rate of return between different wealth groups that has also increased. And yes, that's certainly also part of this.

Markus Brunnemeier: Another question from the audience is, was there a lot of movement of wealthy people moving out of high-tax countries to tax havens, and away from France in this particular chart?

Thomas Piketty: No, I mean, here we are talking about the whole population. We are not talking about small groups or whatever. That's not, I don't think that's very relevant. Although, the existence, of course, of tax havens and the decision to develop a system of free capital flow without any common taxation, common regulation, in the 1980s, 1990s, has certainly contributed to that. you know, to put pressure on the tax system and progressive tax system, and has contributed to this relatively good performance of high wealth groups in general. But again, here I want to focus on this long run trend, which at the end is more important to me than what happened since the 80s, 90s. And so I want to focus on this positive long run trend and try to see where we can move from there in the longer run.

Markus Brunnermeier: And then one more question concerning Sweden, because you mentioned Sweden. Is it true that the wealth inequality in Sweden is actually, there's quite some inequality in wealth, but you said not in income. So do you have countries where wealth inequality is pretty extensive, but income inequality is not? Or does it always go hand in hand?

Thomas Piketty: It tends to go hand in hand. You know, there's a high correlation between the two, but wealth inequality is pretty high everywhere, you know, including in Sweden. I mean, it's not as extreme as in the U.S. So the U.S. has both more income inequality, more wealth

inequality. But even in Sweden, wealth inequality is going to be comparable to what we have here for France, or even a bit more, because you have a lot of indebted people in the bottom 50%.

32:17

So at the bottom, you actually have some negative wealth shares for the very bottom decile. So it can be even more than a little more than in France.

Markus Brunnemeier: And do you have a measure of opportunity equality as well?

Thomas Piketty: In a way, that's partly a measure of this. Because as I was saying, the distribution of inherited wealth is going to be very close to this. So I'm going to come back to this question of equality of opportunity in a minute, and how we can improve this. Let me maybe just conclude with a historical perspective. Before World War I, all European countries were incredibly unequal, including Sweden. you know, which had at the time a very, very unequal political system, you know, with voting rights concentrated and very top well soldiers, you know, in a way that was really incredibly unequal. So this was Europe, you know, before World War One. And here I want to illustrate the fact that, you know, there's been a major, still a major transformation. So if you compare, you know, Europe in 1913 with Europe today, you can see this middle, you know, the rise of this patrimonial middle class, you know, which is still quite significant. So, you know, the two are true at the same time. There's been a lot, big movement toward more equality, but still, there is very high concentration of worse in the U.S.

Markus Brunnermeier: Could you say that it's a war destroying the two world wars destroying all the capital stock. And the capital was mostly owned by the wealthy.

Thomas Piketty: Yeah, well, except that in 2020, you know, the capital stock has been, you know, reconstructed for a long time. And what's important is that still, there's been a structural change in the distribution. So indeed, you know, initially the destruction, unfortunately, is part of what's going on. But then, what I want to stress is that the new institutions that were set up during this period, you know, allowed us to have a different kind of economic growth, with, you know, even much more prosperity than what we had before World War I, but more equally distributed. So how did it happen? Well, you know, one factor is certainly, you know, the rise of what I call here the social state, which you could call the welfare state. I prefer to call it the social state because I want to stress in particular the role of education. So if you look, you know, education is probably one of the most important examples, together with access to health and other public goods and public infrastructure. But education, you used to be a very elitist. So if you look in every European country before World War I, total education spending was less than 0.5% of national income. It was a very elitist educational system. This has been multiplied by 10, you know, today it's 5-6% of national income. In the US, before World War I, it was about 1% of national income, so it was also guite small, but it was twice as large as Europe, so the U.S. had a big educational advance over Europe during most of the 20th century, in particular in the middle of the 20th century. In the 1950s, the US already had 90% of the cohort going to high

school at a time where it was only 20-30% in Germany or France or Japan, and you have to wait until the 1980s-1990s to converge to this sort of universal or quasi-universal access to high school.

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And, you know, I think there's lots of good reasons to believe that this is the primary factor and, probably the most important factor behind the rise of productivity in general, and this much more inclusive educational system has contributed both to more equality and more prosperity. You can see also the stagnation of total educational investment in the past 20, 30 years, which is very paradoxical because a fraction of a generation going to higher education, of course, has kept increasing a lot. Today, it's like 60% of the younger generation go to university in a country like France, 70% in Korea. It was only 20% to 30% in the 1980s, but the total educational spending as a fraction of national income has actually stagnated to about 6% of national income. If you want an explanation for the slowdown of productivity growth, to me, this is the most obvious explanation you can think of, depending on how you write your own endogenous growth model and your equation for accumulation of human capital, if you have this historical stagnation of total educational investment, that's probably not going to help. So in the long run, that's a big part of the explanation behind productivity growth and rise of more equality. Now, progressive taxation also, I would say, has been a huge historical success. In particular, it's very striking to see the U.S. had one of the most progressive tax systems in the world between 1930 and 1980, the top tax rate was 81% on average during half a century. And apparently, this did not destroy U.S. capitalism. If anything, the U.S., around that time, had not only the highest productivity in the world, but this was the time of the maximum economic gap with the rest of the world, certainly because of the education gap I was describing before. So the bottom line is that the main historical factor behind productivity growth has a lot more to do with broad-based education systems than with having very large inequality. So when you have this, if you look at just the simple-

Markus Brunnermeier: But if you look at the tax rate, in a sense, it could be that the tax rate is very high, but there are a lot of loopholes and ways to get around the taxes. So nobody pays the top tax rate.

Thomas Piketty: Yeah, well, you will find in the book a graph, an effective tax rate. And you will see that in the middle of the century, in the US from 1930 to 1970, the effective tax rate in the very top groups was 70%, 75%. So you're right, they were not 90%, but you know they were 70%, 75%. It was hugely progressive, which did not hurt economic growth at the time. And I think it also contributed to the setup of a social contract, which made the middle class and the lower middle class ready to pay more tax to pay for the welfare state. Because if you're in the middle of the distribution and you feel people at the top are escaping taxation, as is the case today, are you going to accept paying for people who are poorer than you forever? Maybe not. And so I think that's probably the most important part with progressive taxation. Anyway, if we look at the simple time series, what we see over time is that after the 1980s, after the Reagan decade, you have a huge slash in progressive taxation. So as we all know the story, Reagan

comes in and says, "okay, I'm going to divide by two the top income tax rate from 70%, 80% to 30%, 35%. Maybe inequality is going to go up, but the size of the pie is going to grow up so much. You're going to have so much productivity growth, so much innovation, that at the end of the day, the average wages and average income of average Americans are going to grow like you have never seen."

40:31

Now, the problem, of course, is that this did not happen. And the growth rate of national income per capita was actually divided by two. By the way, I'm not saying it was divided by two because the top tax rate was divided by two. I think the main reason why it was divided by two is probably the stagnation of educational investment, which I mentioned before. But in any case, what we should all agree upon is that cutting by two the top income tax rate is not enough to boost productivity growth and innovation. And so, and I think a big part of the political problems we see today in the U.S., you know, with the Republicans going crazy against pretty much everybody, you know, the rest of the world, migrants, China, everybody, has to do with this big disappointment. You know, at the time of Reagan, there was a lot of optimism that average Americans will benefit a lot from globalization and tax cuts, et cetera. We've not seen this. And now you need to find an explanation for this failure. And unfortunately, the explanation of Donald Trump and others is to say, "oh, this is because the rest of the world has taken away, you know, the work of, you know, hard working middle class America." And, you know, I'm gonna take it back for him. So, you know, we're talking about a pretty dramatic failure and evolution. Yes.

Markus Brunnermeier: There was, of course, a China shock. Globalization moved a lot of industries outside of the United States. So if you have, you look very much at inequality within the country, but it might be that because there's some industries moving outside of the United States, that inequality in the US goes up, but inequality, global inequality is going down. Oh, yes. These two forces, essentially.

Thomas Piketty: No, you're perfectly right. But I think we could have done even better. You know, we could have had more productivity growth in the U.S., you know, with more increase in education and other public infrastructure. And I think my point here is simply that cutting tax progressivity, you know, was supposed to bring more innovation, more, more productivity growth, and it did not. And so I'm trying to think about an alternative policy. So now looking at the future, I want to say two, I want to make two points. One about the redistribution of inheritance, and the next one about education. So about inheritance, if you look at the, so here I'm describing a system based on the idea of redistribution of inheritance, where basically you would have everybody at age 25 in this simulation is receiving a minimum inheritance of about 120,000 euros, which would be about 60% of average per adult wealth in Europe right now. And you can put similar numbers for the US a bit higher in dollar terms in the U.S. today. Okay, I'm not saying this is going— and this is financed by a progressive tax on inheritance on top children, and also progressive wealth tax, which I think is better suited to bring big revenues and progressive inheritance tax. But anyway, it's a combination of the two in this simple simulation. Okay, so in effect, what this is doing is that the bottom 50% of children who today receive close

to 0, they are going to receive 120,000 euro at age 25. And the top 10% children who today receive a bit more than 1 million on average, they will actually in this simulation receive about 600,000.

44:29

So we are still very far from complete equality of opportunity. And if you want my opinion, I would be ready to go much further than this. But what I find interesting is that you have lots of people who pretend they are in favor of equality of opportunity at a very abstract theoretical level. And then when you make concrete proposals like this, they start to scream, and they are very afraid, and they say, "oh, but all these poor children, they are going to do lots of stupid things with the money," as if rich children always do clever things with the money they receive. And I think here we are at the core of the issue, do we really care about equality of opportunity or not? So, look, I'm not saying this is going to happen next week or next year. I'm just saying, if we want to look at the long run, and if we want to know what we should add to the kind of 20th century welfare state and progressive income tax system to move further in the direction of more equality and also more social mobility and also more prosperity, I think this is what we should look at. Now, yeah.

Markus Brunnermeier: What would you do? I mean, inheritance, can you say a little bit comparing the wealth tax with inheritance tax? What are the trade-offs there? And the second thing is if you have family businesses, so employ a lot of people, how would you then, you know, take the inheritance tax which might destroy the family business, or you would move them all to a stock exchange? Or how would you organize this inheritance tax for family businesses?

Thomas Piketty: You know, I think in all these family firms, you have lots of, you know, engineers, lots of middle or middle upper level managers, you know, would be very happy to become shareholders, and we would be excellent shareholders in the company. So I know, you know, the family members always think that they are the only ones who can have the power and remain in charge. And, you know, look, it's, you know, it's a very human feeling. And, you know, I don't blame them. I'm just saying this is wrong. Historically, having more people to be involved in the management of the company, and more generally, in participating in the economy is good. And I think, you know, this kind of monarchical view of the economic system, where you believe that a particular individual or a particular family, because they had good ideas, sometime in the past, or maybe they were very lucky or probably a combination of the two, they should keep all the decision-making power until they die or even the following generation. But already until they die is a problem, because if you have a good idea at age 25, do you need to keep all the power until age 95? It's not clear. And so I think this extra mobility is good. Now, how would they pay the tax? You can imagine ways where they sell some of the shares and you can have workers in the companies who have priority rights to buy these shares. You can think of all sorts of innovative schemes to allow engineers, managers, and various wage earning groups in these businesses to buy the shares in the long run. Now, again, I'm not saying this is going to happen next week. But I think if you don't do that, if you don't do something like this, then we will always have a very high concentration of wealth. So I think you cannot say – because another story

would be to say, we should just wait for growth and market competition to lead to a diffusion of wealth. The problem is that we've had growth for the past 200 years. And still, we don't see this much of a diffusion of the wealth in terms of the bottom 50% share.

48:48

Markus Brunnermeier: But you don't talk much about social mobility. It could be that the top 10% are now different people than the previous decade's top 10%. So it moves around all the time.

Thomas Piketty: Of course, of course they have moved. I mean, hopefully they have moved. But what I'm talking about is the bottom 50% of children, you know, who don't receive anything. So I am talking about mobility, exactly. And, you know, I'm just saying you cannot just rely on you as a few poor individuals will become rich. I mean, that's very nice for them. I'm very happy for them. But, you know, here we have 50% of children today. So just to get the number straight, in Europe today, which is still less than equal than the U.S. and much less than equal than Brazil or South Africa, the bottom 50% of children receive 5% of inheritance when the top 10% of children receive 55% of total inheritance. And the question is, you know, does it make sense for people who pretend they believe in equality of opportunity? You know, it's a simple question. And to me, it makes no sense. And so the other view would be to say, "okay, maybe it makes no sense, but from a point of view of economic incentives and economic efficiency, in fact, if you try to reduce inequality, you're going to reduce incentives for families at the top to do all sorts of useful investment and saving. And so don't try to reduce this inequality, because otherwise the sky is going to fall and the economy is going to collapse." I have some respect for this view, except that we had the same view 100 years ago about the redistribution from the top 10 to the middle 40. And this view was wrong, in the sense that the diffusion of wealth towards the middle 40, historically, I think, was a great success. And so I think it makes sense to consider that we should continue to go in this direction.

Markus Brunnermeier: Let me push a little bit harder. So like what you see a lot in the US, that wealthy people provide extra education for their kids, you know, they get very, very special education, which is also a form of inheritance in a sense. Would you also like China, for example, outlawed essentially these extra educational schemes?

Thomas Piketty: Like, did they outlaw this?

Markus Brunnermeier: Yes, all these extra educational schemes, President Xi made it much more difficult that you can actually have some, you know, hire some tutor, some private tutor to educate your kids better, to perform better in school. And it was very expensive. It's very excessive. And China outlawed it now. Now it went so far that actually, now, these tutors come as cleaning ladies disguised in order to do that. But that's also a form of inheritance. And it also gives an extra opportunity to wealthy kids.

Thomas Piketty: So let's talk about education. transmission of financial wealth, but now the transmission of education is also quite important. And I wanted to conclude with this. So this is

the situation in the US right now. So this is data from Emmanuel Saez and Raj Chetty. You know, we're able to match social security records of the parents and students.

52:23

So you have the percentile of parental incomes, rate of access to university. And basically, you know, it's almost a 45 degree line, not completely. So, you know, if your parents are very poor, you still have a 25% chance to go to university. It's not zero. And if your parents are very rich, you only have a 95% chance to go to university. So it's not 100%, but you know, it's close to the first diagonal. And of course, in fact, it's even worse than that, in the sense that the kind of university you go to when your parents are rich has little to do with the universities you go to when you come from the bottom. So here, what I am saying is that, there's again a huge gap between the theoretical discourse about equal opportunity, super mobility, et cetera, and the reality of the kind of society in which we live. And I think it's important here again to be serious about the numbers and to set targets. I mean, you can say "this is the best we can do. There's nothing we can do just like for inheritance."

Markus Brunnermeier: But you probably agreed that one has to start before the university education.

Thomas Piketty: That's for sure. You have to start before, but that doesn't mean you cannot do anything at the level of university education. But in any case, I think, but to conclude with a very positive final thing is that in the long run, even for education, if you look at the distribution of educational spending, we've had some improvements. So if you look today, you know, like in France, so here I look for a generation, the top 10% of children will receive the biggest education spending, as compared to the bottom 50% of children will receive the smallest education spending. So today, we have a more equal distribution than in 1910, and a lot more equal than in very unequal settings, like colonial settings, where you had basically complete segregation by education, like in the south of the U.S., before the civil rights movement. And it was probably even worse in French Algeria than in the U.S. south, by the way, in terms of the difference in education budget between the schools of the Algerian Muslim and the school of the settlers. So as compared to sort of very unequal societies of the past, either Western countries 100 years ago, or of course, colonial and segregated countries, you know, we've gone to a more equal distribution of education spending. But this is not the end of the story, because even if you look, even this distribution for France here in 2020, which looks equal, in fact, of course, the bottom 50% groups, they are five times more numerous than the top 10, and they are getting only not even twice as much in terms of total budget. So in fact, if you look at spending per child, this is the actual data. So the top children today are going to the very elitist French Grande Ecole. They will get 200,000, 300,000 euros in individual spending. So it's like what you were saying. It's an additional inheritance. And in the case of France, this is actually public spending. So in a way, there's a lot of hypocrisy everywhere, not only in the U.S. And in my country, I can tell you, the public spending, in effect, is exacerbating the initial inequality in family origins. So, I think no country here is in a position to give lessons about this. And all I'm saying is that this long run movement toward more equality of opportunity, access to inheritance,

access to education, this long run movement is not over yet and has to continue and will continue. And I think we should all be concerned and be interested in this long run evolution.

56:36

Thanks a lot for your attention.

Markus Brunnermeier: No, thanks a lot. It's great that you have this positive perspective on it and going forward. One thing you didn't mention, just one perhaps one sentence, universal basic income. Is this also in your scheme somewhere in your thinking or that's...

Thomas Piketty: Yeah, except that it already exists. I mean, it's already there in most Western Europe. So, to me, that's already, it's already done. So now we'll have to look at the next step, which is universal inheritance. So let me make clear, the minimal inheritance I'm describing is in addition to basic income, in addition to public education, it's not instead of.

Markus Brunnermeier: But of course, a lot of these extra benefits you get from the social welfare state is conditional that you're poor. Universal basic income, I would say, everybody gets it as a starting point, independent of the initial conditions.

Thomas Piektty: Right. But then you pay, you need to pay it with a more progressive income tax. So, you know, at the end of the day, it's by definition, only people below certain income levels get it. So, you know, in terms of net transfer, you know, the question is, do you want to increase the basic income as compared to the level of minimal income? So, you know, in France today, it would be, you know, you would get 600 euros per month for a single individual, maybe you can increase it to 700, 800, but, you know, if the full-time minimum wage is at 1,200, 1,300 per month, you know, net of all social contribution income tax, you know, you're not gonna put the basic income at the same level. So by definition, there are limits to what you can do. So you can, maybe you can increase it a little bit. You can make it more universal in the way it's distributed, more automatic, less stigmatization. That's very important. You know, I'm not saying no improvement can be made, a lot of practical, but that's not going to dramatically change what we already have.

Markus Brunnermeier: Very good. I know that you have a hard deadline, so let's stick with it. We have one minute left. Thanks a lot, Thomas. It was fantastic to get your perspective on inequality and this positive perspective that we are moving to a more equal opportunity society. Hopefully it also works at the global scale. Thanks again. And thanks to everybody for joining us and hope. to see you next week again. Bye-bye.

Thomas Piketty: Thanks a lot, Markus. Thanks a lot, to all. Thank you.