Unedited Event Transcript

Global Inequality: A New Approach for the Age of Globalization

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Jacob Kirkegaard: Good afternoon, everybody. If I can call the room to order, so to speak. My name is Jacob Kirkegaard and on behalf of the president of the Peterson Institute, Adam Posen, it is my distinct pleasure to welcome you today on today's event on global inequality. As our name here, the Peterson Institute indicates, being the Peterson Institute for International Economics, we care a lot about global issues and how economic forces act among nations, but we are of course also subject to the old dictum that all politics is local. And with that in mind, it really is with a great amount of pleasure and interest that we welcome today Professor Branko Milanovic, who is going to present his new work, who's going to offer what is a global approach on this most otherwise domestic of issues, namely inequality, and we really very much look forward to this.

Professor Milanovic is really probably among the top three globally recognised scholars of the issue. He's a senior scholar at the Luxembourg Income Study Centre, he's a residential, I believe, residential visiting professor. Is that --? Residential visiting professor at the City University of New York, and of course, also has a long distinguished career behind him at the World Bank, and other academic institutions. He will give the initial remarks, present his new book on the subject for about 20 minutes, after which we will hear from some of our own scholars here at the Peterson Institute, who have also recently offered books on this issue.

First, my colleague Caroline Freund, who before joining the Peterson Institute was the chief economist of the Mena region at the World Bank, and is the author of her own, in many ways provocative, innovative, empirical book on this subject, called *Rich People, Poor Countries*. And then following that, it is a pleasure to introduce my sometime boss, the vice president of publications and communication, Steve Weisman, who also recently published a very relevant book on this topic called *The Great Trade-Off; Confronting Ethic Conflict in The Era of Globalisation*. And then, finally, before we start the program, let me again thank the Eranda-Rothschild and Stavros Niarchos Foundation for their continuous support on the work that we do here at the Peterson Institute on ethics, globalisation, and inequality. But without further ado, Professor Milanovic, the floor is yours.

Branko Milanovic: Well, thank you very much for coming. I would like, of course, to thank Jacob, Caroline, and Steve for inviting me. And, as Jacob said, of course the book, which by the way, you can all buy outside, as you have probably seen, just to remind you, in case you forgot, is a book about global inequality. When I say global inequality, I mean real inequality between all individuals in the world. I have to say a little bit in the beginning about that so that we know really more or less what we are talking about, and I will not have the time to go over all the slides.

Now this is a kind of impossible to read slide, particularly from such a distance, but I have to explain a little bit what it is. It really gives you the structure of the book, which you will also find in the introduction, if you just open it. And I thought it was important to point this out, for the following reason; first, the first chapter talks about global inequality, which I said before, is by definition inequality between all citizens of the world, as if the world were one country. So what you need to do that without really explaining in too many details, is that you essentially have to combine household surveys from as many countries as you can, on average about 120 countries, and then you have to adjust for the price levels between the countries, for which you use PPP numbers.

So really what I want to say is actually a huge empirical or data exercise, which combines household surveys on one hand, and the largest exercise in empirical economics ever undertaken, which is the international comparison project, or PPPs. So that's a pretty massive exercise, and you cannot do it every year, because there are no surveys from all the countries annually. You can do it every five years.

Now, that's actually the first part when I talk about the global inequality, and how global inequality has changed between 1988 and 2011. Then strictly speaking, when you decompose global inequalities, you decompose it into two parts. One part is inequality within nations, like US inequality, Mexican inequality, Chinese inequality, and you can basically add them up for this within a national component.

So in my second chapter, which is there on the left, on the slide, I introduced something which I really will not have time to speak today, so I will skip over that, but it's a very important part I believe, I define something which I call the Kuznets waves. Now of course, many of you are familiar with the Kuznets hypothesis and Kuznets cycle, this is extending the Kuznets cycle further. I will just mention when I present that part, very briefly what is the implication for that US inequality if you believe in Kuznets waves, but it's an entirely new part, a new story.

Then, the second part of the decomposition of the global inequality is differences in main country incomes. So there we are talking about, for example, the US versus Mexico, Spain versus Morocco, and so forth. Now that part is really dealing with the issues of convergence, and divergence between main country incomes, and that part opens other types of issues. I would like to mention two very important ones. The first one is the question of global equality, of opportunity or not, or what I call the citizenship rent, which basically means higher incomes of people in rich countries which are the result of circumstances and not of their effort, and the second part is migration. So obviously migration is a big topic, that part has recently received quite a lot of attention, but you know, it's a very small part of my book, but people like to discuss it.

And then the last part is basically a look at the future inequality, global inequality which would be then driven by these two forces from chapters two and chapter three. And these are the Kuznets waves for within national inequality, and the convergence economics for the convergence of the means. So this is the structure of the book.

Now, as I've said, I will really have to go quickly over the slides. Jacob has kindly promised to keep me on track so I would stay. So let me start with chapter one, and globalisation effects on income distribution in the last 25 years. This is a slide, which many of you have seen it, it has been really published a lot on the Internet and elsewhere. I mean, people have called it many names, including why it's the most important slide in the last 10 years or whatever, but basically what it shows, and I will be brief on that. What it shows on the horizontal axis is percent of global income distribution from the poorest, which is number one, to the 100, which is like the global top 1%, and it shows you on the vertical axis increasing real incomes between 1988 and 2008.

Now what you noticed immediately obviously that these give you just an idea what are these numbers. When we talk, of course, we see that around the medium you have a large increase in income, so about almost 80 or maybe even doubling of incomes in some specific percentiles. And of course, you say these are people who have done very well for around the medium of the global income distribution. But one has to realise their incomes are very low by Western standards. We are talking about incomes which are about five dollars, or six, seven dollars per day, and this is what I call, but it's very kind of, with a caveat, you can call China's middle-class it's really, by Chinese standards, it could be a middle or a little bit above the middle. By the way China now, Chinese median income is now practically the same as the median income of the world and these are the people who have done extremely well.

Now I put China also between quotes, because essentially it is really the resurgent Asia, it is not only China. If you take people within that large group of about one billion people, which is about 20% of the population -- actually 20% would be 1.4 billion people in the world, 90% of that, and these are all people who have done very well in percentage terms, 90% of them are from Asia. So it's not only China, it's also India, it's Indonesia, Vietnam, people often forget Vietnam, Thailand, and so forth. So these are people who have done very well. So we know that, that's our point A.

Now the point B is an interesting one, and that is one that has generated lots of attention, is that you noticed of course that the 80^{th} percentile, which is of course much higher than the median, you noticed that actually there are groups of people there who had very little real growth. In some cases, zero growth, nobody had negative growth on percentile levels, but very low growth. And then when you look at these people, 72% of people in that group, are from the so-called old OECD countries. So if you add new OECD countries, mainly from eastern Europe, you end up with a number of 90% who are in that group.

Now these are people who are in the lower parts of their rich countries income distributions, and three countries stand out there. And it's US, quite well-known with really very moderate increase at the median, and this is all based on household surveys, so not wages. In Germany, that many people don't know, but Germany actually had really very little growth in the lower part of the income distribution. And Japan, which actually had a negative growth. So we know about that. So that would be the point B.

And then the point C is what you can call global plutocrats, or the global top 1%, and these are the people who also had a very good period of doubling of their real income, so almost doubling of their real incomes. So this is basically a story, I will not draw all obvious, I mean, if I had more time I would have done that, all obvious political implications of that, because as you can see, these rich countries, working class or lower middle class to some extent is squeezed between the two polar opposites. People from Asia, who practically can do many of their jobs for one third, or one fifth of the wage that they receive in rich countries, and of course, there own national top 1% which also compose the global top 1% to a large extent. Not entirely, because as you know, the US is a rich country, so the 12% of the richest Americans are global top 1%.

So this is basically a shape, the structure of the changes which have occurred during globalisation. I also want to mention that it's a very special period, because actually we can show, that we never had a reshuffling of incomes of that magnitude and history ever since the

Industrial Revolution. So is the largest reshuffling of incomes since the Industrial Revolution. And that's, of course, important to keep in mind.

At the same time, that actually implied a decline, particularly over the most recent period, a decline in global inequality. So two things really are very important to keep in mind simultaneously, particularly when we discuss globalisation, because it's needed a force only for the good, not a force only for the bad, that you can actually have increased inequalities within each individual country, whereas global inequality goes down. Because global inequality is driven essentially by differential growth rates between the countries.

I had a blog, which I published this week, and it attracted quite a lot of attention about some technical issues with Indian data. But what is important there, is with the new Indian data which uses income, we actually have much greater inequality in India, showing India to be about the same as Brazil, but what happens to the global income distribution, with new Indian data? It goes down. Because income in India is about 47% higher than consumption and Indian population is in the middle and below. Of course, many of them are down to the bottom 1%, but still, what it does to the global, it reduces the global inequality. So that's what I'm saying, one should keep in mind that apparent paradox, which is not a paradox because it's a reality, but it's apparently a paradox that you have declining global inequality, whereas national inequalities all, not all, but many of them, go up.

I've got hundreds of slides here, so I will actually not really show them. This is the same slide in many different versions, with percentiles, with so-called quasi anonymous -- I'll explain that, it doesn't really matter for now, and with exchange rates where it says PPPs, but you know, the shape of what was called the elephant is always the same. And a key part of the shape are points A, B, and the top points for the global top 1%, point C. And they always remain like that, which is very unusual and you extend it to 2011 which is the red line, that actually middle get even more exaggerated, because China and India had a very good period. And the top now gets actually somewhat less remarkable, or less high, because a lot of people in that global top 1% are people from the rich countries who actually suffered, in relative terms, during the crisis. So you know, that position of the global top 1% is less -- the gains have been fewer, or less, percentagewise than they were up to 2008.

Okay, so this is how the shape of the world now looks with a much thicker middle, and this is this emerging "global middle class" with people with incomes between three, or maybe five dollars a day, and something like $16, so it's relatively poor by Western standards.

Now the second part is one that I actually said is very important, but we don't have time now to go over that, but it's really, how should I say? Really modification and revision of the Kuznets curve, which actually talks about the cycles. Now this is a pretty ambitious chapter of the book, which really puts Kuznets cycles also in a historical perspective, not only the modern history, which is from the Industrial Revolution onwards, but even before. So I look at Kuznets cycles in the preindustrial societies, it's based on the work of many economic historians over the last 10 years, and of course you'll find the cycles, and I explain what they believe drives them and so on. I would like to mention only one important thing. These cycles, which actually let me show you the example of Spain, which is actually most dramatic from several papers actually, a series of papers from Prados de la Escosura and Alvarez Nogal.

You actually see the cycles that was from 1282 to 1842, so it's actually 550 years of Spanish inequality, and you can see the cycles. And actually the cycles are driven for the pre-modern societies, by really two elements, none of which is economic. By things like epidemics and plagues, which actually reduce population and increase wage, and then reduce inequality. Very similar to the Malthusian movements, and then by wars. So really these are the two forces, which I call the malign forces, which were driving inequality in the preindustrial societies. But I will not bore you with preindustrial society. Let me go to the industrial society, and the societies with rising mean incomes.

Here we have actually the data, and particularly what I want to show you for the US and the UK -- so this is long-term data for the UK starts with 1688. And of course, my argument is that you do actually see a cycle there with, scores, the first peak being much higher than I think -- and there are good reasons why the second peak, I think, is unlikely ever to be as high as Gini 60, which is basically the Gini Brazil that England had at the last part of the 19th century. Then you see actually, for all the countries there about a dozen countries there, you see the trough of inequality, which was, as we all know, which happened in the very last years of the 1970s, or early 1980s, and then we see, of course, the rising inequality after that.

Now you look for the US, the shape is fairly similar, the amplitudes are less dramatic than in the case of England and they're actually even -- let me just show you, it's even more dramatic when you look at in log terms, which maybe you should because you see the amplitudes much better against -- oh by the way, I forgot actually what is on the horizontal axis, it's GDP per capita, in 1990, dollars. It's actually what comes from Addison's series, which has now been updated. And on the vertical axis is the Gini coefficient. So once again, I forgot that, on the horizontal axis you have GDP per capita of the country, on the vertical axis you have the Gini coefficient of the country.

So now the important part to summarise this part which actually is quite, as I said, ambitious, but the important part there is to realise if you believe that there are cycles, then we argue, as I argue, we are now witnessing the upward portion of the second Kuznets cycle in the modern era. Now, the implication of that is that, of course, there are forces, and I explained there which, I believe drive, this cycle. They're essentially technological change, globalisation, and policy, this is not new, but you actually find similar forces having driven the first Kuznets cycle, but the optimistic part of that is that the Kuznets cycle will eventually, inequality waxes and wanes, eventually it would actually come to a certain top, and will go down. So that's the optimistic part.

I don't think for the US, and I will not talk about that now, but maybe in the Q&A I can, I don't think that for the US we are now at a point where actually we are at a peak. I think that the forces which are driving US inequality, the underlying forces are so strong that we are actually still having some time to get to the peak, although I have to notice that over the last maybe 5, 6 years, we really have not had an increase in the US inequality. There was actually decline for us because of the crisis, then an increase, so we are actually basically plateauing. But I'm not seeing the forces that would drive it now, right now.

So let me then go to the third, I mean there are lots of cool graphs here, with the Kuznets relationship, which I said, I show UK and the US because the data is a very long range. The US data are just now being published for 1774, 1850, 1860, and 1870 in a new book by Lyndhurst and Williams, which actually I would very highly recommend. It's called *Drawing Unequal -- Unequal Games*, sorry, and that actually goes to the -- for the first time actually does empirical work on US inequality before the independence.

So let me skip all of these other things, and of course, I argue that in the present day we should actually look at Brazil and China as being at the top, they're actually starting to go down on the first Kuznets wave. So I actually see -- basically to make it very clear, I see China and Brazil falling the first Kuznets wave, and the US and more developed economies being on the upswing of the second Kuznets wave.

Now, the third part is the part about between country inequalities. And why it is called from Karl Marx to Frantz Fanon and back to Marx, is for this reason. Is that actually when you decompose global inequality, as I said before, into between countries and within countries, and if I call within countries inequality, "class" inequality, basically inequality within each nation would mean maybe you can say aristocrats and peasants, nobility and peasants, capitalists and workers, so whatever you want to call it. And then I call the second inequality, which is between nations, just for the graph, I called it locational based. Because it's essentially inequality which is due to your being in the US, and being born in the US, rather than being born in Kenya.

And then if you look in 1850, these are data that come from Bourguignon and Morrison's paper, obviously lots of guesswork is there needed for distributions of the different countries in 1850. But whatever guesswork we have, and there is some corroboration of their results, by [inaudible 00:22:13] for example, and even by myself, I did a little bit for the 19^{th}-century global inequality. The fact is that actually class was relatively important. As you can see, about 40% of the total, on the vertical axis you have a Gini index, so about 40% of the Gini index in 1850, which was the first bar, was due to class, and 60% approximately location.

Now you go to actually practically today, but even more dramatically maybe 1990, 80% is due to location. So inequality has risen between 1850 and today, globally inequality, in a very specific way. It is actually some countries have become much richer, and they pulled up despite most recently the increase of inequality among themselves, they pulled up actually all the populations that they had, and basically they created a locational component, or a locational component became very important.

Now if you want to project that in the future, and of course, your own work here by Paolo and by Thomas actually shows that, is that actually what with projections of China's growth and India's growth, and all this Asian growth. In the future we would have a decline of global inequality, but again, very particular decline, that locational component would shrink compared to what it is today, and maybe the within national component would increase. So that's why I called it the first moment is, of course, it's a Marxist moment, or Marxian moment, because it was really class component was very significant. The second moment, which is now, is the, at the extreme, is Frantz Fanon moment, is really colonial power versus the Third World, and the third moment could be, again, the class moment.

Now just to finish this part, is it actually, if you look at the current moment, as I said before, the very fact that location is such an important part of determinant of your income leads to the issue, which is a political philosophy issue, of equality of opportunity globally. Just one sentence what I mean by that, is that whenever we talk about equality of opportunity, we, of course, talk about gender, race, whatever. But we never actually talk about inequality which exists in income which is due to location, to the very fact that if somebody is born in a rich country versus a poor country.

Now there may be some good reasons for that, and [inaudible 00:24:40] discusses that, but the question that we have to ask, does equality of opportunity end at national border or not? So that's really a big political philosophy question. Which of course, the political philosophers have addressed before, but economists have ignored it.

And the second point is the issue of migration, because if you see large gaps in incomes, for economies, it is obvious that they would lead to migration. And of course, that's especially the case in Europe where we do have, and I'm leaving aside the question of refugees, which is a discrete issue of the war, but we are talking about huge gaps in current income, and probably in the future between Europe and Africa, and large discrepancy in population growth rate. So this is really a big issue that also we need to face. And I like always to say that one should see migration as a part of globalisation and global inequality. In other words, it's not an issue that just fell from the sky, it's an issue that is actually very much present in the structure of inequality that we have.

So since Jacob has actually already warned me that I'm down to probably now -30 seconds, I would like actually to conclude here. I will not actually look at the fourth chapter, which I said deals with Chinese inequality, and US inequality, now and in the future, and a little bit about global inequality, but I'm sure that the questions about China's inequality, calculation, the future, whether the numbers are reliable and so on. And the US inequality which I call the perfect storm of US inequality will actually be raised. So I would like actually to stop here and to thank you again for your attention. Thank you very much.

Caroline Freund: I sent a presentation, but we'll see if it comes up. In the meantime, I want to say that anybody interested in inequality must read this book. So Branko put up this chart that's called the elephant chart because it looks like an elephant with the trunk up there, the superrich people, and the hump, the top of the hump being the Chinese. I would agree that that's, if not the, certainly one of the most important charts of this century. And it's the flipside of what the macroeconomists call convergence. So in recent years, China has been growing and that means their incomes are expanding, and as a result of that, we see convergence and less global inequality.

This is so important at a time when Obama, Christine Lagarde, lots of people are saying inequality is the most important economic challenge of our time, it's really an Anglo bias. Because that's what's happening in the US, is this rise in the superrich, but it doesn't mean that's what's happening in the world. For across all the individuals in the world, what Branko's work tells us is inequality is actually decreasing.

It seems like my charts aren't going to come up, which is really a shame because I had a nice presentation here, but one of the points I wanted to make was, in Branko's work, there's kind of a global Kuznets curve. He doesn't call it that, but he has this nice figure which shows that global inequality increased and now is coming down precisely because of this convergence. And so what we see is one curve for the globe, that looks very much like the curve Kuznets proposed in the 1950s -- oh, I think it's coming up now, so you can see the curve I'm talking about. Oh, I can see it. So I can see my presentation? But nobody else can. Oh. Okay.

So this is actually taken directly from the book, it's chart 3.2 or something, figure 3.2, and I'm going to call the global series that goes like this, now there's a break because of just data differences. It's kind of a global Kuznets curve. And remember, Kuznets did his -- part of the reason he won the Nobel Prize, the work in the 1950s, well that's what US inequality look like. So we have this global Kuznets, but local polariser. So recently for the US, inequality has been increasing as it has in the UK, Ireland, Australia, as well as some other countries, but it really is -- this sharp rise is really largely an Anglo phenomenon. I think the data work this book and looking across countries is as far back as Branko has gone is really amazing.

I do have one concern about this whole literature. This is the only literature we nobody put standard errors. And I think if we did, we would find out that we know a lot less than we think we do, because the standard errors from when I worked a little bit with household surveys, when I was at the bank, my reaction is the standard errors are actually quite large. So I think we probably know a lot less than we think we do.

So just to remind everyone, now that I've said Kuznets so many times, what the Kuznets curve is. It's this idea that he came up in the '50s when that's what US inequality look like, structural transformation, moving out of agriculture, and into industry, increases inequality, because you have some very poor people and some better off people. And then, as you get richer, and people get more educated, and everybody moves into the new industry, inequality actually falls. But then Piketty came along and said, hey guys, that's not what's happening. Inequality is inexorably increasing and really only wars and other things are knocking it down. The famous, really simplifying here, the R is greater than G, or when the returns to capital are greater than the growth rate, you're always going to have this rise in inequality.

And Branko's contribution is to come up with Kuznets waves. So he argues that there are different forces, so you have things like structural transformation, technology, openness, that tend to push inequality up, and you have other features, wars, politics, the underclasses demanding a different tax structure, aging population, and that might demand a different tax structure and such, education, that push inequality down.

As a discussant, I have to offer my own thoughts on this, and I find it very intriguing, but I think it does beg for formalisation. Because if I'm going to think about waves, I want to know what is the factor that makes one thing push over and then it falls, or the other push-up. So is it like our old SS investment models that there are certain thresholds that you hit, or what's going on that makes this happen. I mean otherwise it's kind of some things push up, some things push down, white exactly is it waves?

And then the other question is, there is another theory out there, which is Tim Bergen, which basically says education makes it go down, technology makes it go up, so sometimes it's going against these, why are these Kuznets waves, and not a Tim Bergen trade-off or something like that?

The other critique I'd have of the book is a puts globalisation upfront, and I would argue that globalisation has been really important, as a trade economist, for lifting the Chinese and other lower income countries up, but I would disagree with globalisation as the main force behind the within country inequality. I think most trade economists find that technology is much more important. Even just last week, we had Autor and Hanson here talking about their work, and while they work has gotten a lot of attention, for showing the importance of trade on employment, still there's a much larger factor that's due to technology, and we can't forget that. That we are now manufacturing more than ever, we just do it with a lot less workers.

So that's really important, and I think if you're going to talk about the sources, it would be nice to have some kind of decomposition of those sources. I've already mentioned the Anglo factor. What Branko does in this book as well, is he discusses all the sources out there, which now are so many. An important one that we haven't discussed yet today is mate sorting. So people are finding that lawyers use to marry their secretaries, now they marry another lawyer. That contributes to inequality as well. So there's lots of different factors out there.

And finally, this is my last slide, there's some really interesting and controversial issues in this book. So one is this idea of citizenship rents, which I really like that concept. You get something just by being born somewhere, and that's really your citizenship rent, and he shows that the US premium relative to the poorest country is a factor 93. So just by being born in the US, you're about 100 times richer than if you'd been born in Congo. He also argues that one policy to deal with that, and this has gotten a lot of attention around his book, is that we should codify a second-class citizenship. And I think that could be a useful area to discuss. I would think of it as kind of expanding in the US, the H1B visa program which has been so incredibly successful.

And then finally, on the elephant trunk, since I wrote about the superrich, just to make one point, he worries, as much of this literature does that this rise is so ominous, I just want us not to forget that some of these people do really tremendous things, and develop new innovative products. And they help their countries to grow. So Foxconn employs 1000 people. So Foxconn is part of the reason you get the top of the elephant. It's not just the trunk of the elephant. And I'll stop there, thanks.

Steve Weisman: Thank you. Mercifully, I don't have any PowerPoints. It's an honor to be here, thank you for inviting me. And I just want to echo what Caroline said, this is a terrific book, on an increasingly relevant subject obviously and I note that Branko said in his presentation, and in the book, that globalisation is a force both for good and bad, which shows that his book is premised on moral and political judgements, and not just economic analysis, and that's some of what I'd like to address.

I think that one great thing about this book is it improves on the narrow view of Thomas Piketty. And especially when Piketty annoyingly and approvingly observed that the decline in inequality in the 20th century overlooked that this welcome development came from war and economic disaster. And Branko's book rectifies that by saying, by talking as he did just now about the malign forces, including epidemics and natural disasters, and the benign forces that he mentions in the book, which offer us a bit of a roadmap on how to get out of this problem.

And second, Piketty never really did come to grips with inequality as a global phenomenon on, and as Caroline just pointed out, and an important contribution of this book, the really revolutionary concept that is that inequality is going down on a global scale, even though it's going up within nations, both rich and poor nations. And that, therein lies the political and moral conundrum presented by this wonderful book, and obviously how we process this conundrum is at the centre of our politics this year.

The first question I want to ask is are we asking the right question? Does it matter that inequality is increasing if there are absolute gains in income for so many people, who have been lifted out of poverty? And Branko deals extensively, and he mentioned John Walls in his book, and Walls argued that policies must be judged morally on how well they deliver their benefits for the least well-off. So would we not find that the current system has accomplished that goal? But are we stuck, on the other hand, in a world in which inequality at home, the stagnation of the middle-class, and the enriching of the already rich becomes a kind of price that we have to pay for elevating the world's poor and reaching this moral result? We have to hope that the answer is no, and we need to find ways to help those hurt, by globalisation. But blaming the superrich may not be that helpful, and as Caroline just pointed out, maybe the very rich should be judged in different terms, on whether they contribute to economic welfare, and not simply whether they're rich.

This book deals extensively with the causes of inequality, and Branko said we would get into that in the Q&A, and I think that's very important, because we have to start thinking about how we address the problem. The difficulties of sorting out the factors, disaggregating them, or as Caroline puts it, the decomposition of the factors is the difficulties are striking. How much really does result from globalisation, and how much from technology, as Caroline just pointed out?

How much is from what Piketty seems to believe that is the main culprit, which is capitalism itself, and how much are from other factors as the mate sorting that Caroline mentioned, the marriage reinforcing social inequality? And how much inequality results from what Milanovic cites as the policies of recent decades, and he talks about these policies reducing taxes on the rich, reducing the inheritance tax, cutting social programs, which were carried out, Reagan-Thatcher policies, with the goal of increasing economic growth. And here the book is very interesting, very helpful, but it left me frustrated and wanting to know more about what we could learn about these factors.

Let me conclude with some of his reflections and recommendations at the end of the book. First, for all of his speculation and projection of the Kuznets curve, or wave, the book tries to be optimistic, but as he suggested actually just now, the evidence in his book is, at least for the United States, pretty pessimistic about addressing inequality, in the United States as I said. And he forecasts, rather gloomily, a rise of the plutocracy, and even the counter revolt that he says would come for populism and nativism.

Well, as we can see in the current election cycle, these concerns are hardly misplaced. But does it have to be that way? Maybe this chaotic election cycle could even produce a consensus, which has occurred before in American history, to accomplish some things. I don't want to be ridiculous, but maybe there will be a consensus on training people through the jobs that are available. And interestingly, for programs like building infrastructure, which is oddly an idea that both Trump and Hillary Clinton endorse.

Second, the book says we're placing too much focus, or it suggests that we're placing too much focus on reducing inequalities among various groups, blacks and whites, men and women, gays and straights, and not enough on income inequality. That's a very provocative observation, and you can see that in the Sanders and Clinton campaigns, that Clinton seems to have made headway on that first kind of inequality.

This book also implies a call for a greater global governance, so that wealth and capital does not escape taxation by fleeing to other countries. And this idea to me makes sense, but to say the least, it's an idea whose time has not come. And equally unlikely, I think is, and maybe more so is this proposal for greater immigration from poor to rich countries, creating this kind of second class citizenship in the US for immigrants, to make it more acceptable. As Caroline said, we have something like that already, but I wonder whether doing so might actually increase inequality, or whether it would be morally acceptable.

Another point is that Branko's book does argue that economic growth matters, and he implies that policies to reduce inequality should not impede growth. Maybe you can address that in the Q&A. More education and training would be one way to accomplish that goal, but interestingly, the book seems sceptical about redistributive programs. He is not a socialist in this book, socialism was a great success in reducing inequality, he says, but it didn't do wonders for growth and innovation.

And finally, as an economist, Branko calls for a methodological nationalism, or an "anti-methodological nationalism", saying it's becoming more irrelevant. What he means by that is that this book calls for us to see the economy as a global phenomenon, and not concentrate our research and our data on isolated individual countries. And I think this book, more than anything demonstrates the irrefutability of that proposition, and one of the greatest contributions that it's made to the literature. Thank you.

Jacob Kirkegaard: Well, thank you very much. First of all, to Branko, but also to my colleagues. As the moderator who, as you have been told have been ruthlessly in charge of timekeeping. Let me try to make some amends, the things that were cut off because of this, and perhaps the first question, ask Branko to talk about one of the things he didn't have time to do in his initial remarks, namely the issue of inequality in the United States. More specifically recognising that this was brought up both by Caroline and by Steve in their remarks, and after that we will open up to the floor.

Branko Milanovic: Thank you very much, Jacob. What actually both Caroline and Steve brought up, first I would like to thank you for really extremely really generous and very useful comments. It's not often, sometimes the comments are useful, but they're not generous. In your case, they were both. So let me just say a few words about the US inequality, how I see it progressing in the years to come, and what I call like five forces, which I think will push inequality up. Now you have to take every economic projection with a grain of salt, so I'm not really unaware of this, but let me just list them.

One is the tendency, which we have seen recently, of capital share to go up. So that by itself would not be a problem, and just to explain why it would not be a problem, let's suppose that everybody in the country had the same share of capital goods, or same endowment, then actually the increase in the capital share would reduce inequality, because that particular source would be very equally distributed. The reality of course is not, it's that actually capital is very heavily concentrated, and it's very heavily concentrated in a very peculiar way, is that the rich people have more of it than the poor people.

Again, to make this clear, unemployment benefits are also very heavily concentrated. They have the same Gini coefficient as capital, except that they're concentrated among poor people while capital is concentrated among the rich people. So that's where the rise of the capital share, because also that was implicit in Piketty, but it's not explicit in Piketty. It has actually an impact which translates into increase in interpersonal inequality. So they are these two first elements.

The third element is the result of the New World by Christoph Lackner and Tony Atkinson, that show very interesting phenomenon, also based on US fiscal data, is that you have a rising association between having high income from labour and high income from capital in the hands of the same people. So it's actually very interesting because it goes back to about 40 years, and you have an increase of that. So to give you an idea, a person who is in the top 1% by labour income has about an 80% chance of being in the top desirable capital income. That was not the case in the past. And if you think of a classical capitalism, people who had large capital incomes had very little labour income, and the reverse. So we are now, what I call, that was my term, a new capitalism which I introduced in the book. It's really the capitalism where the rich people are both capitalists and highly paid labourers, or workers. But the association actually amplifies inequality.

The fourth element is one that Caroline mentioned, and it was the mate sorting, or, homogamy, which also, for the reasons that Caroline said, increases inequality. In the fifth element is the political control by the rich of the political process and the rules of the game. So these are the five elements that I see pushing inequality up. Now it doesn't mean that all five of them will continue, but even if two or three do continue, they will be important elements that are not very easily reversible. So this is what I see for the US in the approximate future, I might say, a decade or so.

Jacob Kirkegaard: Thank you very much, Branko, and the floor is open. There is a mic, travelling mic, and there is also a standing mic in the back. And please identify yourself.

Jack Goldstone: Hi, I'm Jack Goldstone, George Mason University. Branko, I think you're missing one other factor that will push up inequality, and that's the structure of retirement. We're about to face a huge global surge in retirement. Higher income people tend to be healthier, they will be able to work longer, they also will have generally white-collar less taxing jobs. Working class, lower-middle-class people tend to be in jobs that are exhausting and boring, they want to retire, but they have very little retirement income, and pensions will be stressed. So over the next 20 years, you're going to get another huge boost inequality between those who are better off today, who will do well in their post 60 years, and those who are not doing well today, who are poor.

Now I bring this up because, you mentioned the elephant curve, you mentioned the economic benefits of convergence, but there are different ways that global economies could converge, and the way that your elephant curve shows, we've got politically the worst possible way to have convergence. That is the middle-class and the rich countries is getting squeezed on both ends. They're losing compared to the middle-class and emerging markets, they're losing compared to the upper class in their own country. So this is what spurring both the nativist and populist, and the damage of that political backlash could be much worse than some of the economic gains, right? So could we see a different pattern of convergence? How would that develop to blunt some of this political problem?

Branko Milanovic: I don't know, maybe there will be also, I think for Steve and Caroline, I would on this one, on the first point, Jack is right actually, I think that, I heard his point, but it was too late for my book. Actually I think in Moscow was the same one that you made about retirement. I must say I am, if I were to criticise my book also, I would say that actually the role of demographics in my book is somewhat under emphasised, because we do actually have, particularly with respect to aging of the population, retirement, and on a global level plateauing of the population in China, growth of population in Africa. There are many issues there, but I really, I think I should have spent more time on that, but I didn't.

On the second issue, I couldn't agree more. I think it's precisely what the curve does, I think that's the reason -- the elephant curve, that's the reason why it was tweeted so much, and discussed so much. Also, I have to mention with regard to what Steve mentioned is that actually I wrote that part in April of last year. I really did not anticipate Trump, nor did I ever anticipate that he'll be as successful as he is. So, it was just -- it was before the phenomenon. But I think it also reflects exactly that.

Now can we have a different type? You know, I must say that maybe by inertia, I don't see how we could, because what I see, obviously China is becoming a richer country. Maybe the pressure on US wages from China will become less, but then you have a whole range of other countries in line, like as I said before, Vietnam, India, Indonesia, and Ethiopia, and others. So if that continues, that raises really I think a very good question. What domestic policies should be done in the US, in the rich countries, in order not to have that particular partner? Because if nothing is done, you would then have to expect for another 50 years that same elephant chart. And is it, I mean politically democratically possible to have it? Would democracy have to give way because of that particular pattern of growth?

Caroline Freund: I'll just say one thing, which is to mention my colleague's work, the Bronco mentioned earlier, Paolo Mauro and Thomas Hildebrandt, that they're focusing exactly on this issue of forecasting inequality into the future, both across countries and also within countries. And so when that work comes out, it will have something on this topic. But in the within country forecast, they're actually finding that going forward, it contributes to the reduction in inequality, but largely not from the advanced countries side, from, like you said, China's at the top of the hump. So it doesn't contribute that much on the advanced countries side, but just say that based on current demographics, inequality would decline.

Jacob Kirkegaard: Would you step to the mic, in the back? And then Susan afterwards.

Dan Roberts: Thank you. My name is Dan Roberts, I'm a journalist with the Guardian newspaper. I just want to say how refreshing it is to hear all of this from a global perspective. I've been covering the election campaign here, and I'm fascinated by what you've all touched upon, which is this collision between the political processes happening at a domestic, at a nation state level, and these big global forces. And I just wanted to ask you do you see those, at the panel as a whole, do you see those as on an irreversible collision course? I mean how do you get past the situation where you have rising, we you have these global economic trends colliding with national democracies? Is there any way to avoid that collision?

Branko Milanovic: Well, this is obviously just following up on Jack's question as well. It is obviously the big issue of today. Let me put it like this in very stark terms. The first thing that you can actually ask, and people have asked, is the rise of the Asian middle-class taking place on the back of stagnation of incomes in the rich world? That's actually the basic question. If you can, and of course that goes back to also the point that Caroline has made, I do tend actually to think that there is a link between the two. I don't think it's a link that we can prove empirically, but even if, and I never use the word causation, or anything, but even if the narrative is reasonable and you've got two things actually now, of course, it's maybe a logical fallacy that actually two things happened at the same time, but many people who vote don't see that as a logical fallacy, so they will believe it.

And I also think actually, maybe in response to also Caroline's point, I see and I argue that actually this process is, while conceptually different, and I call them TOP, Technology Openness and Policy, are really linked, they cannot be really broken down. And I give an example, for example, of your iPhones or other things, which of course are technologically driven. But in order to be so cheap as they are, or accessible, or laptops, they had to be produced by some labour, and that labour is a cheap labour in Asia. So then they come here, or they come to all the other countries in Africa and elsewhere, they're cheap, they're accessible, and then they require applications. But if you had one third of the iPhones that we have now, there would be many fewer applications. So I think the two things are really related. And of course, there are studies that show more technology to be important and globalisation less.

Now going back to the question, or the reverse, globalisation is more important and technology, less like -- and Harrisons's recent paper with two quarters. But now, going back to your question, if you were to look at this curve, and not really look at individuals who are behind it, you would have said actually globalisation is doing pretty well. The middle, which is like 1.5 billion people have actually been doing very well, even the bottom has done reasonably well, the top has done well, there is some category of upper-middle-class who have not done well. So it's good.

The problem is that the political space, it's not a global political space, but national political space, and I think that's actually your question, and I think that's the key problem. And on that I'm pessimistic, going back to the first question, right in my answer that these two things can be somehow solved harmoniously. Although I think that national policies would then be keen to actually address the issue. Because there are no global policies on this.

Caroline Freund: Yeah, I just want to say that really if you look across countries, there are striking differences. So it's not the case that all advanced countries are experiencing what the US and UK are experiencing. So policies clearly do matter, and actually maybe Jacob should be the one to answer this question, because Denmark is an advanced country that's done really well on this.

So what we're missing in this country is adjustment assistance, but I would say, again, it's not necessarily globalisation. I think that technology and modernisation of society, whether it's in mating, or whether it's in production, how you produce things, matters a lot, a lot more. Germany, which has a surplus, trade surplus, and booming manufacturing, also has a declining middle-class because they're mechanising everything. So France doesn't, because they have policies that are just, Denmark doesn't. So policies matter, but again, I would just really stress that globalisation probably isn't the main factor in the US. Even Gordon Hanson here last week put it at 17%, that's pretty small, that's 83% that's coming from other forces.

Steve Weisman: So I also can't say that I'm optimistic, but if you look at American history, particularly talking about America, and look at the late 19th and early 20th century, where changes like this were also taking place, the populist movement of the 19th century advocated lots of economic reforms. But they didn't get put over the top and in the 20th century, in the progressive era, until the middle-class, the professional class, and the working class joined the populace to demand great progressive era changes, which included, for the first time, an income tax and an inheritance tax and other regulations.

So I think the scary part of the equation is not that you couldn't form a majority for policies to correct some of these issues, it's that the policies themselves are not that obvious. And I think the most depressing part of the presidential campaign is that we're not hearing anything particularly encouraging or innovative from either side of the spectrum, including I must say, on the Democratic side which deplores the inequality. But I think some of the policies that we hear from the left, or the Democrats are not any more likely to address this problem.

But we've gone through these tremendous changes before, driven by technology, in American history. There were a million coalminers employed a century ago, today there are only 75,000 or 80,000 coalminers, and there may be none even as Hillary Clinton says, by the next couple of decades, whether we like it or not. And half the American families moved off the farm not so long ago. So not to be Pollyanna-ish, but in some ways the changes that the US has undergone in the past were even greater than the ones that we're on the threshold of. So I wouldn't be entirely pessimistic about this coming cataclysm and confrontation.

Jacob Kirkegaard: I guess just one quickly on Denmark, I think Denmark, and particularly the Danish case, it's very important to make a distinction between populism, meaning rage against the native or the local 1% or income inequality, and nativism. Because I can assure you that nativism is alive and well in Denmark, as witnessed by the 25% support that the Danish people's party have. Susan.

Susan: Good point. Branko, congratulations on really ground-breaking work, it's really changed the whole debate on global inequality. But one question for you, and for the other panellists; I enjoyed your five forces that are going to drive US inequality depressingly higher, but I'm wondering how that plays out in continental Europe. I've now heard Caroline say several times that inequality is an Anglo Saxon phenomenon, so to what extent is that? Because your five structural forces are different in continental Europe, or is it simply a taxation and redistribution policy that's changed the outcome?

Branko Milanovic: Okay, let me, I would actually have to disagree a little bit with Caroline here, because I don't think that it is only an Anglo phenomenon. And if you look at OECD countries, and you look at OECD reports, out of, I think now, 33 members, and even leaving aside Chile, and Eastern European countries, some of them, Mexico. You actually have I think 27 that have had an increase in inequality between the mid-80s and today, and only France, Belgium, and the Netherlands did not have. So it is, I think, a rich countries phenomenon, other than being a phenomenon in China and India. But it's really an OECD phenomenon.

Now the US is maybe more extreme, because the increase in the Gini in the US where inequality has been larger, although the UK is pretty close, maybe even larger, I'm not sure. Then Sweden is there, then Israel is there. There are countries with large increases of -- when I looked at Israeli data a couple of years ago, I still had this image which is totally wrong, of Israel being a quasi-socialist country. Israel has a Gini of the US level now.

So it is a phenomenon, which I think is for all rich countries. Now, it is also true that policies have a role. So it's not like you do nothing, and I had a nice slide, for example, which illustrates it on the example of Germany and the US. The underlying market income inequality in Germany went up more than the US. But the offsetting was larger than the US. US disposable just follow the market. In Germany actually there was offsetting. So I'm totally in favour, and that's why I don't want to have this unique approach, it's either globalisation, or it's either technology, or it's either policy.

As I said, I called it TOP, because it's easy to remember. When I was in Paris last week, Piketty was in disagreement with that, and I said to him, because he said policies are key, and I said that's POT. And it's fine with me, POT, TOP, or OTP, you call it whatever, but I think actually the three are there, and I think are very difficult to disentangle, the three forces.

Caroline Freund: Just to say about the Anglo, I agree with you, I mean the data show increases elsewhere, but it's really the Anglo countries plus Israel, and I'm not sure about Sweden, where there are significant differences. And so the other differences are really small. So if you look at the curve, it's this slow upward -- is the US and UK where you see these big upward shifts, and Israel, and I think it has to do with finance and technology. The development of two industries in the Anglo countries that really just breed the super high incomes as well.

Jacob Kirkegaard: Okay could you give -- [Inaudible 01:07:04].

Speaker: Hi, I am [inaudible 01:07:16] Garcia from the Embassy of Spain. I would like to ask you Branko to comment very briefly on what would happen to your chart if you take India and China out, I think you mentioned it in the book. So it's great to have a global perspective, and I think it's very good, but it's also important not, because of the weight sometimes, the rest of the world, I think behaves differently. And then, just to add on this key debate on the policies, the technology, and the openness, it's not the first time that we're in a wave of technological progress, and it seems that this time it is favouring capital, and those that are better off, I think, more than in the past. There are things that are changing now.

So what kind of policies do you think that we need to really change that trend? Because he said in the book, global inequality is going down for the first time in history, but inequality is also growing in China, in Brazil, and so the trend is scary. Okay, you can average a little bit, but the prospect is for more inequality. So what do you think that are the policies that -- and you have mentioned some of those, but the key to try to stem this trend? Thank you.

Branko Milanovic: I would like actually also to go back that I think it was to some extent also raised in Steve's comments. The first issue, of course, is the trade-off between growth and inequality, I'll come to that in a minute. But when you ask me about policies that I see, how should I say, I call them the policies for the 21st-century for the rich countries, I see really working on endowments much more. I will explain that in a second.

I think that the 20th century policies, which are policies of redistribution of current income through taxation, of course, social transfers, I think have reached a certain limit. And we see that in the last quarter of the century, even if you look at the size of the welfare state, or the size of the state by expenditure, the government expenditure, despite the attempts to reduce it, it has not gone down. And the attempts to increase it, I think, are also going to fail. Because simply people are unhappy to pay more taxes.

So that's why I think I actually work on endowment, it seems to be much more important. And what I mean by endowment, I mean more equal distribution of capital, which I mentioned before, which can be done. And actually, I'm not a specialist in fiscal tax policy, but it seems to me that if we had been able to create tax loopholes that have been very efficient for the rich people, there must be also some tax policies that would make smaller investors actually more happy to invest and have some return. And give them actually some interest of state, what actually Margaret Thatcher called people's capitalism.

Secondly, there is the issue of worker participation in shares of the wrong companies, or as I said, if you don't want to combine the risk, then in investments outside. The second thing is that actually working on endowments on the human capital side or education. Well of course, you actually have in rich countries, you're really almost reaching the top, you're not going to have 16 years of education for everybody. But the returns to education, depending on places where people go to school, are vastly different. So that actually, I think, calls for equalisation, or for public funding of universities. So I think the work should really go into the endowments, which are much longer term projects, than simply on the redistribution of current income, which I believe is really added for the inheritance tax, I think it's really come to a maximum that the electorate wants to accept.

Jacob Kirkegaard: We have time for one more question. Ted?

Ted Moran: I'm Ted Moran, from Georgetown University and PIIE. Let me also complement all of our speakers in this entire presentation, but I want to be a little bit more optimistic following on what you just said, and expanding on what Caroline said. And that is, beginning with the path breaking work of Bill Klein, and heading into more modern times, we really see the globalisation is not responsible for more than 15% or 20% of the income disparities within countries, or certainly within the United States. And the real factor is skill bias technological change. I look at Caroline because she sometimes makes it sound like she's talking about robots, and certainly there is a replacement of labour with capital. But the bigger thing is the reward to greater skills, and this is true in tradable and non-tradable. Let me give just two very quick examples --

Jacob Kirkegaard: No, no, we have time for one more question, not --

Ted Moran: Okay. Well, I'm sorry, I'm not going to make a question. So I will conclude by saying, and I think you're too focused on manufacturing. The renaissance of the middle-class in the developed countries is going to be high performance services, and even within manufacturing, about 40% of manufacturing jobs are now service jobs, they're not actually production jobs.

And to conclude, to complement you, this means, I would say, community colleges and polytechnic universities, I mean Georgetown's going to do fine, Harvard's going to do fine, but the place where we can expand is on vocational training, and you ask about the must be favourable tax policies. Sure, the place to start the student loans. I mean there is a -- I mean not for everybody, but for lower income people. So I think there are tools here to be much more optimistic. Sorry Jacob, that was a statement.

Branko Milanovic: Can I just say one sentence, or two? I was not actually obsessed by manufacturing, and it's hardly actually featured in my book. I was obsessed with the fact that the middle-class in the US, whatever they are doing, has not been doing well. And I think it's actually true for most of the rich countries. Again, going back, actually I was using Luxembourg income study data recently, the share of market income in the median [inaudible 01:14:05] has gone down for Germany, UK, and the Netherlands, everybody.

So this is I think a general phenomenon, and one has to deal with that, and of course. In that sense I agree, policies are very important if you want reverse that, and not to go into the issue that can be raised if there is a 50 year of stagnation of middle-class income, but whatever they do, but we see them actually not doing well. And the second point on the wage, the part of the wage inequality, which is due to technological change versus openness. It's a very tricky part, and I think there was a very long discussion in the 1990s, which in my opinion was a generally sterile discussion, because it really never addressed the fundamental issue, which is inequality at the household level. Because from wage to household income is a long way.

The first the people that you have in wage distribution are wage earners. They can be married, not married, divorced, whatever. Then you have people who are actually not actually employed. Then you have capital incomes, then you have social transfers, then you have government redistributions, or taxation, then you have mate sorting. So all these elements that the literature just disregards, because it cannot deal with them. And in reality, they're the elements, in that sense, Piketty's contribution was very significant to have brought them to the discussion. Because we would have had this discussion in a very sterile way, which we had in the 1990s for 15 years, which really did not move us very far.

Jacob Kirkegaard: Thank you very much, Branko. And we have reached our witching hour, so on behalf of the Peterson Institute, let me once again thank you, Branko, for a very informative and stimulating presentation, and Caroline and Steve for a great discussion. Thank you very much.