



General Discussion: Demographic Trends in Global Labor Markets

Chair: Janice Eberly

Christine Lagarde: Thank you, Professor Goldin, for all the work that you've done on these matters. I'm a great admirer. But I would like to speak as a mother, as a grandmother, and as the daughter of a PhD professor who had four children, most of them born around the baby boom era. So, allow me to make four comments, and to the extent that it helps, I would be delighted. Point number one: to Chad's issue about the finite model to which we are heading, there's something in me that celebrates the decline, because obviously it's going to be helpful for the environment. That is something to be considered.

The second point that I would like to submit to you, Professor Goldin, is that I fear when reading your paper, that it is at risk of putting you in a position of placing the blame on women for this decline in fertility, and that the paper would be very interesting for those who want to actually fuel this populist perception that women are better off in the kitchen than at work.

My third comment is something that probably your model cannot take into account, but I think that there are four factors that have played a role historically and still play a role today. Number one is the role of hope. If, in 1957, there was such a boom, it was also caused by the post-war climate, which saw suddenly a revival of rebuilding, reconstructing, and having

Markets

families. The role of hope, I think, matters, and I don't know how much it can be factored into the great work that you do. The second one is the role of social values. It's hardly surprising that in some countries—I think of Israel in particular here, which is clearly an outlier relative to the other OECD countries—there is clearly a sense of value, a sense of keeping the population at the level where it is, or even increasing it. The third is the role of policies, and I think it would be really interesting to see how some policies have actually worked over the course of time, and how others have not. If you look, for instance, at what the Chinese authorities have tried to do in order to incentivize families to have a second child, money doesn't work. If you look at what Hungary has done in order to do the same thing, money has not worked. Other kinds of policies may work. When I look at my country, France, which kind of tops what I think is your second group, there have been policies in place that have had nothing to do with money, but which have had to do with the environment in which children can actually grow, and the childcare system in particular matters enormously. I remember Martin Wolf explaining to me that in Italy, women cannot have access to both a job and the maternity support and the child caring environment. And as a result of that, they ask their body to go on strike. So, money doesn't fix it.

The fourth point that I would like to make is: you don't bring the low-income and developing countries so much into the picture. And while we might end up with a finite model of a planet, it might also be a very unbalanced one. While we are seeing a decline in the fertility rate in the low income and developing countries, this decline is much less pronounced than in the developed countries. So those are my four points. Thank you.

Claudia Goldin: Thanks very, very much, Christine. I want to respond to just one point, which is the notion that the model puts the blame on women. It does not. If we consider any economic model in which there is non-optimality, we don't place blame on

one side or the other. We fix the problem. And so, in this case, we could say that the blame is on the fact that one side wants to remain in a more traditional situation and the other side says, if you remain in the traditional situation then I may not have enough resources to do the best thing for my child and for me. There's no blame on either side. It's non-optimal. It's a mismatch. And my response to Chad is—thanks.

Doug Elmendorf: Thank you, Jan, and thanks very much to Claudia and Chad. Three quick points.

The first is that the research on low fertility, I think, has usefully highlighted a number of underlying problems with our economic policy and our society that we should aim to fix, almost regardless of what they will do to fertility. So, if people are being discouraged from getting married and having children because housing costs are high or because the tax and transfer system discourages marriage or because young men are having trouble entering the workforce and succeeding, it's good to know about those problems and have them in the front of our minds, and we should address them even if they don't fix the fertility problem, *per se*.

The second point, Chad, and your concern about a lack of labor force growth reducing idea creation, as you know, at least for a while, you can offset some of that effect by moving a larger share of the population into invention, entrepreneurship, and research. That won't work ultimately because of the power of the exponential growth, but it can make a difference for a long time. So, we shouldn't view the share of the population engaged in those activities as fixed. We can change that. In fact, we are changing that now. We're reducing it, oddly, but that can be moved the other direction.

And the third point is just to emphasize your comment, Chad, that for many things, it's the per capita growth that matters, not total growth. And I think that is not a widely understood point. I think it's often confused in the popular discourse. We see an example of that this year in the debate about payroll employment growth. Chair Powell correctly noted that with negative net

Markets

immigration, you should expect lower payroll growth in the aggregate. I think lots of people don't understand that connection. So, I think it's very important for analysts and policymakers to be clear about the ways in which it is per capita growth that matters and the ways in which total growth matters. And those are different things. Thank you.

Roger Ferguson: First, I commend everyone for these great papers. Chad, you stopped short of the thing that I found most interesting. At the very end, you had AI. And the question in my mind, is there an interaction between what we're talking about here, which is human capital as measured by the number of people, and then other kinds of capital that could have, in some ways, a very important impact on how all this comes out. So, anything you could say about that would be very helpful to me. Thank you.

Erik Thedéen: I thought I would say a few words on one of the extreme countries that are presented here. I am the governor of the Swedish Riksbank. So, I was on paternity leave 30 years ago. And that was, I'm not talking about myself, but it's a good story to see how you could change norms. At that time, it was fairly unusual that you did so. But now all men, all fathers take paternity leave. Why? Well, one reason is incentives. I think you now get two months pay that is focused only for the men. So, if you have overall 12 months of pay, two of them need to be taken by the father. That's an economic incentive that actually changed the norms. So now it's not acceptable. It's not acceptable for fathers not to take paternity leave. And I think that's an interesting example.

And that also points to the question about individual freedom. When that was introduced, it was heavily discussed whether it was okay to actually use incentives to force norms. Shouldn't this be a decision that was taken by the parents rather than nudged by the government? So, it is always a compromise to be made, I guess.

Finally, a question. So, we had birth rate at 2, 2.1-ish, like seven, six, eight years ago. Now we're down to 1.5. So even though with the extreme country, we're doing basically what Professor Goldin is saying that we should do to fix the balance, we also have a decreasing birth rate. So, there are potentially other structural factors. Climate change, war, other norms generally. Hard to explain or specify what kind of norms. Are there structural factors that will push down birth rate even if we fix kind of this balance between men and women in their discussion having babies? Thanks.

Mārtiņš Kazāks: Yes, I agree with the AI story. The question would be, will AI be able to substitute for some of the population growth to create ideas?

Then about the non-linearity. If there are going to be fewer kids around, would you see that the value of the kids would increase? For instance, in the Latvian case, what we see is that fertility rates are below 2 but not that low. But then there is quite a push in policy to support women in fertile age. And that's kind of an asset. So, there is willingness on the government side to cater for more kids. So, would you see this as a possibility as well, when the population shrinks, then the value of the kids increases, and then there is some kind of fertility rebound? And the last point, you mentioned that Israel stands out. What is different? Why the fertility rates, if I understood correctly, are higher there? Thank you.

Claudia Goldin: I don't have too many comments. I thank everyone for their comments. I find the following observation very interesting to demonstrate how fast technologies have changed. When Larry Katz and I were working on our paper on the pill and even when I wrote my book on career and family (2021), I included the letters "AI" to mean "artificial insemination."

But another thing that we have to consider is a change in tradeoffs due to an expansion of possibilities. If the demand for apples has gone down because people now have something else to eat other than apples, I wouldn't say that we should have a

Markets

policy that forces them to eat apples. So, it really is quite possible that we are in a position in world history in which some individuals, oddly enough, say that they do not want to have children or only want one and then the other fraction of the population, want their 2.3 children. If you put them together and you can get a total fertility rate below 1.8 or so, and then we're in our disappearing planet world. My interest in writing this paper was to explore issues about optimality of individual choices. And I think that's the main point. And if the optimality of individual choices results in a birth rate that's lower than replacement, so be it.

Chad Jones: The point that came up a couple of times about artificial intelligence, I have two research agendas right now. One is on population, and the other is on AI. I feel guilty whenever I work on the population stuff, because I do believe it's sort of a century-long problem, and the AI stuff feels incredibly imminent to me, especially being at Stanford and in Silicon Valley. It's certainly possible that advances in AI increase our productivity, activity at producing ideas, and to the extent that machines and computers and AI algorithms can augment, supplement, or even replace and help us produce more ideas, maybe people are less necessary for producing ideas, and that could solve a lot of problems in the world. Of course, it's important that it not kill us all in the process, so that's another side to it. So, I do think AI is, one way or the other, I think a lot of these, many of these problems will be solved.

I think it's important to think about the future, and I will say, oh, the second point, the self-correcting question. This definitely comes up a lot. There's a wonderful book by Dean Spears and Mike Geruso called *After the Spike*, and you may have seen they had an op-ed in the *New York Times* a couple of months ago about this, and I highly recommend it to you, because it's a careful study by sort of, from an economic demographer's perspective about these dynamics, and the people who've thought carefully tell me there's actually nothing in there that's self-correcting. It's not the

case that as we have fewer kids, and as we start to grow, and as we start emptying the planet of people, if we go from 8 billion to 1 billion, does fertility magically bounce up to this magic number of two? I think the answer's no. And this is a wonderful point about micro versus macro. From the microeconomic standpoint, there's nothing special about two. The number of kids that women want to have in a world, especially with a high P, that is what it is. That's in preferences somehow. But the magic number comes from the macroeconomic sort of compounding of these forces. And I think as we get richer, it's not at all clear there's a self-correcting mechanism. I will say, I think the mechanism that I find most appealing, the have your cake and eat it too, is to have better gender norms. And it seems like that could be good for lots of other reasons, and maybe good for fertility as well. And that's really where the easy gains are from my perspective. But obviously that's a hard thing to figure out how to get.

Anusha Chari: Thank you, Claudia. I wanted to touch upon something you mentioned right at the end, which is about immigration and in the spirit of encouraging immigration, especially from countries that have higher fertility rates. The paper makes mention of the fact that there is a convergence in the fertility rates of Hispanic women. And so, I was just wondering about the lags involved in terms of the fertility rate of immigrant populations converging to that of the existing population.

So, that was one question. The other is that last year, there was a bunch of survey evidence that came out in an election year about the growing gender gap in political affiliation especially in the 18 to 29 age group in the United States, which suggests that young women have become significantly more liberal. And it's consistent with the college students that you spoke about, in contrast to young men, which might suggest not just delayed marriage, but also even lower match formation. And it would be great to hear your thoughts about what this portends for the fertility rates in the present-day cohorts in the childbearing age. Thank you.

Markets

Claudia Goldin: I do present some more recent evidence in the paper on the fact that some of the largest decreases in fertility in the recent period are due to a group that we would like to have lower fertility. These are teens. But the other groups are Hispanics. There's a convergence of fertility among populations that came from areas that once had higher fertility. They are now converging to the norm in their adoptive populations. But let's just recognize that the whole notion that countries that have low fertility then have immigration from places that have high fertility is now preposterous. All the sending countries, Colombia, Mexico, Brazil, and India, have fertility rates that are almost as low as or even as low as the U.S.

And the last point, in fact, is since Chad said what his most recent research is on. My most recent research now is on Making America Manly Again (MAMA) and concerns the issue you raised, that of toxic masculinity.

Fatih Karahan: A very interesting paper, and as I was reading it, also when I was watching your presentation, I was trying to think through how you can inspect the mechanism, how you can test whether this is indeed what's going on. And if I understand correctly, the story is that an economy grows fast, and women want to take advantage of it, they want to work, but men are too slow to catch up with social norms, and so women don't want to have children. And so, I feel like inspecting what's going on with female labor force participation in these countries, or some measures of full-time work among women, would be helpful to see if it correlates with economies where fertility is declining, especially in group two that you were showing. Thanks.

Amir Yaron: Very interesting paper. It seems like the traditional man, which is part of the friction, seems to be constant. And if I think of Chad's optimism that maybe that's a channel that endogenously will change over time. There's an interesting paper about female labor supply that puts all the weight on technology. It's called "Engines of Liberation," I think it's Jeremy Greenwood. And the question is whether in a similar

way, child rearing, freezing embryos, and other things, from the technology side, will solve this friction that you mentioned. This is also Chad's optimism. It's a very optimistic thing that this could rebalance. And the issue is less cultural. It's more about this technology allowing things to develop that way.

Israel was mentioned. Actually, secular Jews also have high fertility above two, so we contribute to the above two. But obviously, this is where economics goes. The religious parties, part of their incentive schemes to be, I mean, they get big compensation for every child, even beyond four and five. So obviously, they raise the average fertility rate that was mentioned earlier. Thank you.

Claudia Goldin: "Engines of Liberation" is a very interesting paper. But it turns out that the Amish, who didn't use electricity, also had decreased fertility.

Karen Dynan: It's really good to see all this interesting conversation around the fertility issue and burden sharing. Elder care seems like it might be the next frontier, given the growing share of population that's older in so many countries. I'm guessing the very uneven sharing of child care burden in some countries applies also to the taking care of older parents. And what's different there is that having parents is not a choice that women can make, as they can with fertility. So, it would be interesting to think about how the aging of the population along with uneven burden sharing affects behavior on other margins like labor force participation. Also, the aging of the population might have yet additional implications for marriage and fertility rates in countries where the female partner is likely to be the one holding the bag on in-law care. And it may be an issue here in the United States given the coming cutbacks in Medicaid that are going to reduce state funding for long-term care facilities.

Maurice Obstfeld: This is a fantastic paper and I loved the presentation. At the end, Claudia, you asked, "why is this of interest now?" Why are we suddenly focusing on this? I think one issue that you didn't directly address is that there's a sense in some societies that women's advancement comes at the expense

Markets

of men. There are countries where this is very explicit in the public debate. For example, Korea, with its very low birth rate. Women are blamed for this low birth rate because they're going out and getting jobs instead of having babies. But it pervades public policy in various ways that are can be subtle or not so subtle. For example, in the U.S., part of the fixation on manufacturing is the idea of bringing back jobs for men. It channels the vision of the strong man in the factory who can produce and earn a high wage. At the same time, services are viewed as somewhat more skewed toward women's skills. In that sense, the trade policy agenda of this U.S. administration is pro-men and to some degree anti-women. And we can find elements of that elsewhere in their agenda.

Jordi Galí: I wonder whether, rather than a self-correcting mechanism, what we may have is a self-reinforcing mechanism in the following sense. Suppose that the well-being of young cohorts is inversely related to the dependency ratio, because it implies a higher tax burden, for instance, because of a more limited voice in the political debate, and so on. And suppose that parents or potential parents care about the welfare of their potential children. Then decisions about the number of children that parents or potential parents make will not be independent of the decisions of their fellow countrymen. If others want to have children, my incentives to have children are higher. If people in my cohort, parents in my cohort, don't want to have children, my incentives to have children are lower. So that may generate a coordination failure of some sorts that brings about a trap, a fertility trap. And of course, in this case, there are externalities, and I think there is a case for governments to intervene one way or another. Is there any evidence of that mechanism being at work?

Larry Katz: So, I think there have been a lot of great comments. And one way to think about trying to unify some of the stuff Claudia, Chad, and other commenters are saying is that we have a pretty good sense that there's an equilibrium in

Claudia's model of traditional-traditional. If women don't have other opportunities, you can have high fertility above the replacement level. And there's long periods of history where they're stable. There are also periods I think of as being in a disequilibrium with high mismatch, when there's rapid growth and rapid change, and men and women's views of child rearing change dramatically in extreme cases. That's where you get low, low fertility. I think the big questions are, is there a self-correcting mechanism in the next generation such that men will have different attitudes or there will be changes in policies to lower the costs of child rearing? Or is there likely to be reinforcing backlash? It's a backlash sort of equilibrium where you stay there at low-low fertility. And how can policy get one out of there? And then there's the question which was raised by the great comment about Sweden. If we reach this new equilibrium where women have excellent opportunities, there are more progressive gender norms. And as Chad said, there's nothing magic to say the preferences, even if couples are aligned, are going to be at 1.8 or 2.3 children. And that, I think, is the big uncertainty, because I think you can see cases of countries getting to that equilibrium. But why it seemed to be stable around replacement for a long time, why has it fallen below is, I think, a big open question.

Claudia Goldin: These are very, very good comments, and I think that they'll feed into my new work on MAMA.