



THE BROOKINGS PODCAST ON ECONOMIC ACTIVITY

“Are fertility rates falling because of social comparisons?”

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Episode Summary:

Fertility rates are falling in many countries around the world, with births failing to keep pace with deaths in nearly half of countries. Researchers believe it's possible that the world's population will start shrinking in the near future, and the effects could be catastrophic for institutions like Social Security. A new paper explores a novel explanation for this decline in fertility: The role of social comparison between parents. On this episode of the Brookings Podcast on Economic Activity, David Wessel is joined by two of the authors to discuss the parental rat race, the high costs of education, and the impact of social media.

[music]

EBERLY: I am Jan Eberly, the James R. and Helen D. Russell Professor of Finance at Northwestern University.

STEINNSON: And I'm Jón Steinsson, Marek Professor of Public Policy and Economics at the University of California Berkeley.

EBERLY: We are the co-editors of the *Brookings Papers on Economic Activity*, a semi-annual academic conference and journal that pairs rigorous research with real-time policy analysis to address the most urgent economic challenges of the day.

STEINNSON: And this is the *Brookings Podcast on Economic Activity*, where we share conversations with leading economists on the research they do and how it will affect economic policy.

EBERLY: In nearly half the countries on earth today, there are more deaths than births each year. This decline in birth rates is cause for national concern, with effects that will ripple forward decades into the future.

But before policymakers can address the problem, they need to understand why people are having fewer children. In their paper, "Policy concerns in an era of low fertility: The role of social comparisons and intensive parenting," Lukas Mahler, Michèle Tertilt, and Minchul Yum look to provide answers to this question, examining differences between countries as well as across U.S. regions.

STEINSSON: Traditional work by economists on falling fertility focused on the so-called quantity/quality model. In this model, increasing returns to education reduced impact of child labor, among other factors, lead couples to choose to invest more in each child they have, but to have fewer children.

Another prominent explanation for falling fertility has been female liberation. Women now have greater opportunities in the labor market and more bargaining power at home, and they choose to work more and have fewer children.

This paper explores a third explanation for falling fertility: social comparisons. If your child's status in society depends on doing better than others, this can result in an inefficient arms race of sorts when it comes to parenting, which raises the cost of having children and leads couples to have fewer children.

People's decisions regarding how many children to have, and how to raise those children, arguably yield many forms of externalities, some negative and other positive. This paper is emphasizing one such externality that pushes down fertility and has various interesting but likely quite controversial public policy implications.

EBERLY: Today's interview will be led by David Wessel, Director of Brookings' Hutchins Center on Fiscal and Monetary Policy. David will be joined by two of the papers co-authors: Michèle Tertilt, Professor of Economics at the University of Mannheim, and Lukas Mahler, Assistant Professor in the economics department at KU Leuven.

Now I'll turn it over to David.

WESSEL: Thank you, Jan and Jón, and greetings to you, Michèle and Lukas. This is a really interesting paper, but I want to set the stage a little bit. So, Michèle, maybe you could start by giving us a sense of why you tackled this thing. What has been happening to fertility, both in the U.S. and in other countries?

[3:30]

TERTILT: Yeah, so over the last two decades, we've seen a sharp fall in the total fertility rate in the United States from about 2.1 children per woman to less than 1.7. And we've seen similar trends in several other countries, for example, Singapore and Chile.

I do want to stress, though, that while the fertility rate is falling in quite a few countries, this is not a universal phenomenon, especially if we focus on high income countries. There's actually quite a few countries that have experienced even a slight rise over the same time period, like Germany, for example, and other countries where fertility have been low already for a long time, but then not falling any further. And some countries like the United Kingdom have even experienced sort of a mini baby boom.

So, I believe that the recent decline in the United States has gotten so much attention lately because it coincides also with the fall in several developing countries like India and China. And that actually brings the total world fertility rate close to the replacement level, resulting in concerns about the shrinking planet.

WESSEL: So, replacement level means essentially every couple has two kids, and then the population would be stable. And even in the countries that you refer to where the decline over the past couple decades hasn't been so sharp, fertility is still low relative to what it was in some historic period.

So, why should we care if people choose to have fewer children?

[5:00]

TERTILT: Yeah so that's a very good question. In some ways, we could view children, like a consumption good like cars, let's say. And if people don't like a particular good, if they don't like cars anymore and they'd rather travel instead, there's nothing wrong with that in principle.

But now the main reason many governments are concerned today is the sustainability of the pension system and other transfer systems. So, for that, we need young people, new people, and if no one is producing children, eventually we run into a problem of these transfer systems.

But I want to ask still, is the financing of the Social Security system really a valid reason to engage in expansive pro-natal policies? As an economist, I would argue that we should really identify the frictions and market failures that lead private decisions to be different from what is socially optimal.

Now, several such frictions come to mind. For example, you could think of climate change or a clean environment being a public good, and so larger populations implying more polluters. But that would be an argument for birth control policies, not

for pro-natal policies. So we need to think about frictions that lead parents to choose fewer birth than what is socially optimal, and in our research, we advance one such reason. Namely, comparison motives.

WESSEL: Let me stop you there. It's not only, as I recall from the discussion we had at the conference, what is the optimal level of fertility, which sounds a bit big brotherish, but there's some evidence that women are having fewer children than they said they would like to have had.

So, some of this suggests that that may not be socially optimal, but even for their own desires, they're not having as many kids on average as they said they wanted to have. Is that right?

[6:49]

TERTILT: Absolutely. So, the gap between stated fertility desires and actual fertility is quite sizable, and in fact growing in recent years. At the same time, I think we need to be a little bit careful in interpreting that, because when people say "in an ideal world they'd like more kids," that can be many different things. For example, had they ever met their husband earlier or had they ever met a husband, or if they were richer or, so, it's a bit difficult to interpret that.

At the same time, I would agree, there seems to be something is a little bit going wrong that leads to a wedge between what people want and what they can achieve. And there can be several reasons for that, but one – and that's what we're arguing in this paper – are comparison motives.

WESSEL: Right. So, Lukas, comparison motives. Let's talk about what that really means. It's basically a kind of "keeping up with the Joneses" phenomenon. So, describe what you think is one factor in this decline in fertility in the U.S. and in some other countries.

[7:51]

MAHLER: Yes, yes, precisely. We think that these comparison motives are one factor or could be one piece of the puzzle behind the decline in fertility that we've seen in the U.S. and in other countries.

So, the idea behind these comparison motives is that people care in general about their relative status. And this is an old idea that was proposed by Veblen more than a hundred years ago. And in the macro literature, this is, as you said, formalized as this idea of "keeping up with the Joneses."

So, usually this is about relative consumption, but what we believe is that these relative status concerns are also relevant when it comes to children. So the idea is that parents compare the educational outcomes of their children to those of other people's children. And if that happens, then the quantity/quality tradeoff is tilted towards quality.

So, this quantity/quality trade off, maybe to explain this real quick, is the idea that parents in principal value both the number of children, so having children, but they

also value the quality of children, and the quality of children is something that can be invested in.

Now, if something like our status concerns drives parents to care more about the quality aspect of children, then that makes children extra expensive, which depresses the birth rate.

So, that's sort of the mechanism that we have in mind and formally fledge out in our paper.

WESSEL: So, in the upper middle-class Washington, DC context, I want to be able to send my kids to an expensive private school. The high school my son went to in DC is now charging \$60,000 a year tuition. So, if I want to send my kids to Sidwell, if I have three, it's going to be really expensive. So in order to send my kids to Sidwell Friends and then onto the Ivy League, I want to have fewer kids 'cause each one is going to cost more if that's what I want to get out of parenthood.

So, what do you think is the strongest evidence that you're onto something here, Lukas?

[9:53]

MAHLER: Right. So, if you're asking about the strongest evidence in a sort of statistical way, then probably this comes from what we see happening in many countries in East Asia. So, particular in South Korea.

As you may know, Korea is the country with probably the lowest total fertility rate in the world right now at around 0.7 children per woman. So really, really low. At the same time, parents invest a lot of money into private after-school education programs for their children. Also, these are hagwons, cram schools in which children often stay until very late at night.

So what has been shown by Michèle and Minchul, our other co-authors, together with Seong-Eun Kim in another paper, is that part of this, what has been called education fever, could be attributed to education spending spillovers.

So the idea here is that when richer families increase the education related expenses for their children, then this causes less wealthy families to also raise their expenses, leading to exactly this type of educational arms race driven by social comparisons or “keeping up with the Joneses,” as you say, that underlies our theory.

So, what we are trying to argue in this paper is that there's good reason to believe that this negative relationship between the strength of the comparison motive and fertility also plays a role outside of East Asia. So, to make this claim, we look at data, for example, from the World Value Survey, where respondents are asked about their values and beliefs, and what we find is that in high income countries where parents are on average, more worried about being able to give their children a good education, fertility is lower and has also declined faster in recent years compared to countries where parents are, on average, less worried about education.

Now, we also – and this is maybe most interesting to the listeners – we also zoom into the U.S. In particular, here we use information on social connections through

friendship networks in Facebook. So concretely, there is a measure called Economic Connectedness Index that was created by Raj Chetty and co-authors, and what this index measures is essentially the share of connections that individuals from lower socioeconomic status have with higher socioeconomic status friends on Facebook. And the way we interpret this is simply that the higher the share of high SES friends you have, and the stronger is your upward comparison motive.

And then indeed, what we see in the data is that U.S. counties where economic connectedness is larger, these counties also have lower fertility rates.

WESSEL: So, when we look across the United States and think about fertility, obviously there are lots of different demographic groups, lots of different ethnicities, different socioeconomic status. Is it possible that this phenomena is significant in the U.S. only for a small slice of the population?

The upper income families, like the ones I mentioned, who care more about bragging at a cocktail party that their kid went to Harvard or Yale or Princeton. But that's a relatively small number compared to all the people in the U.S. So is it possible that you're picking up something that's limited to one segment of the income distribution?

[13:07]

TERTILT: Yeah, of course, that's a good question. One might wonder whether this sort of rat race or arms race is a phenomenon confined to high-income families.

However, recent empirical evidence suggests that it may actually occur more broadly. There is quite a bit of recent research in sociology that's showing that intensive parenting practices have become widespread across social classes in the United States, but also in other countries.

We also know that weekly hours of childcare per child have risen over time and that this is true also for non-college educated parents, and especially for non-college educated fathers. And then, in Korea, very specifically, there we looked at a lot of data on private education expenses, and those are also very common across the income distribution.

And in fact, if you look at expenses relative to income, families in the bottom quintile actually spend more than families at the top quintile in Korea.

WESSEL: So when you talk about intensive parenting, you mean basically people seem to be spending more time with their children than some people did in the past?

Maybe I'm making this up. You know, people used to just send their kid to the playground and the kids were on their own, and now the parents are spending more time, and that makes it more expensive in terms of time spent, and that might limit the number of kids you want to have. Is that basically the intuition?

[14:33]

TERTILT: More time, but um -

WESSEL: More money.

TERTILT: That makes them expensive, but also what kind of time, that's what the sociologists have looked at. More educational time or also aspirations for children have gone up along the income distribution.

WESSEL: Okay, so you suggest some interesting policy responses. So if we start from the premise, as you do, that if these frictions, as economists call them, are discouraging people from having more kids than they would like and that would be socially optimal if we're going to finance the retirement of older people, one thing you said, which was a little controversial at the conference, was you wanted to tax this extra education.

I learned that if you propose taxing education in a room full of economists, you pretty much get burned at the stake. But talk about what policies you think we might consider if we want to remove this friction and let people have as many kids as they really would like or as would be good for our society.

[15:36]

TERTILT: We are quite aware that taxing education sounds like a crazy idea. Obviously, in most contexts, education's a good thing. It raises human capital and ultimately standards of living.

Now, our point is that there's certain types of private education investments that seem excessive. And that maybe one could consider taxing those. So take the example of these hagwons in Korea. These are private cram schools and many children attend until very late in the evening. You can also see some investment in American families that may be not really raising human capital.

So the examples I have in mind is to get children into college, an entire industry has developed around that in the United States, so that includes SAT prep classes and also tutors who essentially write the essays for the children. So, if you hire a tutor that writes your college entry essay, that does not increase the human capital of the child.

So, we think there are some education investments that may be wasteful or even harmful. So some of these intensive parenting practices, and especially this excessive after-school education, has already been linked to mental health issues in children, especially in East Asia. And more generally, if you think about what's the flip side of long study hours, well, that means less time outdoors, less physical activity, and perhaps even insufficient sleep.

So all of these things are known to be important for healthy development. So that's why maybe one can somehow tax these specific types of education investments. Now, I realize that won't be easy to target them, but there are some examples already from other countries. So the UK, for example, abandoned the VAT exemption on private schools just this year, and the Korean government implemented curfews, so limits on the opening hours of these hagwons, so kids couldn't go very late anymore. And also, China's double reduction policy of 2021 de facto banned private for-profit tutoring providers.

Now the U.S., on the other hand, seems to have gone in the opposite direction by expanding very recently the 529 plans. So, in this recent change, they broadened in fact the definition of qualified expenses, so now tutoring outside the home, and also fees for national exams qualify, which are precisely the things we think should perhaps be taxed,

WESSEL: Right. So some of this though, is a distribution thing, right? I think it seems to me, at least in the U.S., we have lots of subsidies, tax subsidies, that upper income people take advantage of, and the proposals to change them may be more for equity than for the what you said.

I just want to explain one thing for people in America who aren't familiar with the value added tax. When you said in the UK when you buy a service, you have to pay a value added tax. And until recently, if you were sending your kid to private school, the VAT did not apply to that. But now the VAT is going to apply.

Let me ask you one final, I just want to see your reaction to something. As you may recall at the Brookings Papers Conference, one of my colleagues said that he thought that in his social set, it wasn't so much investing in college prep and stuff, it was this, in the U.S. context, overinvestment in kids' athletic stuff, hiring private coaches because that is seen as a way to give your kid an edge to get into the Ivy League school. And so he proposed, if you want to tax something, maybe we should tax or limit that.

Now I was just curious what your reaction, one of you, was to that idea?

[19:19]

TERTILT: I think that's an interesting idea. I mean, on the one end, I think athletics, uh, in sports is important for kids of course. But if it's done excessively and also very, um, one dimensional, and if the sole purpose is to get into a good college, then that's clearly also a problem, and that should perhaps be somehow taxed or regulated or limited in some ways.

Let me also mention maybe another policy direction, realizing that taxing education is very controversial, maybe a completely different dimension could be to try to weakens people's comparison motives or their ability to act on them.

So, the entry system itself, the admission system, maybe, that's sort of partly the problem. You know, maybe we can reduce the importance of high stakes exams or communicate at least the rank information more cautiously. So let me give an example of what I mean. So, Korea very recently replaced an exact score system for college entry with just a five-tier scale. So previously they had a very precise ranking system where you could see exactly what percentile of the whole national distribution you were. People were studying like crazy for, you know, getting tiny amount ahead. But if you have just a five-tier scale system and you're somewhere in the middle, then what's the point of investing a lot more?

WESSEL: So Lukas, is there anything you think we should add to this conversation?

[20:46]

MAHLER: Maybe one last thing. If we think about policies, so I mentioned this evidence using data on Facebook friends. So, there are a lot of efforts recently thinking about starting to regulate social media and usually this is done with the idea of protecting children directly, but what our research suggests is that maybe what's missing here is the angle on the effect of social media on parents, and as we say, that can ultimately, uh, lead, for example, to lower fertility.

WESSEL: Yeah, that's a good point.

Okay well, Michèle and Lukas, thank you for a very provocative paper. I enjoyed reading it and I enjoyed talking to you.

[21:23]

MAHLER: Thank you.

TERTILT: Thank you.

[music]

STEINNSON: Once again, I'm Jón Steinsson.

EBERLY: And I'm Jan Eberly.

STEINNSON: And this has been the *Brookings Podcast on Economic Activity*. Thanks to our guests for this great conversation and be sure to subscribe to get notifications about new releases of this podcast.

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