

EconoFact Chats: Automation or (Immigrant) Labor? Responding to Labor Scarcity

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I'm Michael Klein, executive editor of Econofact, a non-partisan, web-based publication of the Fletcher School at Tufts University. At Econofact, we bring key facts and incisive analysis to the national debate on economic and social policies, publishing work from leading economists across the country. You can learn more about us and see our work at www.econofact.org.

Michael Klein

Luddites get a bad rap. The term luddite is pejorative, referring to someone who is against technological progress, and the advantages of the modern world. The actual luddites were skilled handloom weavers in early 19th century England who were legitimately worried about losing their jobs with the introduction of automated textile machines. They met at night on the moors surrounding industrial towns and smashed machines they thought were responsible for the loss of their livelihoods. Automation today is also replacing jobs. Factories are filled with computer-guided equipment, ATMs take our deposits and give us cash, and self-checkout machines tally up our grocery purchases. Factory workers, bank tellers, and grocery checkout workers are not involved in sabotage, but they still may consider themselves facing the same fate as the 19th century luddites. In a new article in Foreign Affairs, Lant Pritchett argues that automation is an economic choice, not an inevitability of ongoing technological progress. And Lant, who is a development economist, further argues that the people who are most hurt by these automation choices are those in poor countries who would gladly fill positions in richer countries, but are prevented from doing so by immigration and travel restrictions. Lant is currently the research director of the Labor Mobility Partnership. In the past he's worked for the World Bank and he's taught at Harvard, Oxford, and the London School of Economics. Lant, welcome back to EconoFact Chats.

Lant Pritchett

Thanks for having me Michael.

Michael Klein

Lant, in your article in Foreign Affairs you talk about the irony of a sign in a grocery store where you live in rural Utah. The sign says 'we support U.S. workers,' but it's hung over a self-checkout machine.

Lant Pritchett

That's a great example, I think, of how technologies are being developed to displace American workers in non-tradable industries like retail checkout, but the technology is actually very difficult to develop, and it's being developed due to an artificial scarcity of the availability of workers to do this kind of job. That's an artificial scarcity because there are millions, hundreds of millions, around the planet that would be perfectly willing to come to America and do these jobs, but are prevented by the barriers to workers that exist that make it illegal for them to move.

Michael Klein

In fact, this is occurring at a time when birth rates in developed countries are falling. We have an EconoFact memo by Melissa Kearney of the University of Maryland who's pointing to that. There isn't an absence of labor worldwide, but there may be in developed countries.

Lant Pritchett

As we know as economists, what generates trade are differences. One of the biggest differences in the world today is the demographic differences between the rich world where birth rates have fallen, populations are aging, the demographic pyramid is inverting, and we're in a period of chronic labor scarcity because the labor force age is growing slower than the age, and the developing world that has a very large youth bulge of people that are going to have a very difficult time finding jobs. It's almost a perfect situation in which, if one could make it possible for people from the youth bulge to work in the labor forces of the labor scarcity, there's mutual gains from that exchange, but those exchanges are blocked by immigration laws that don't create any mechanisms for labor mobility.

Michael Klein

You use the term demographic pyramid Lant, and that refers to the way in which younger workers support older workers through social safety net programs or things like social security. Can you discuss that a little bit?

Lant Pritchett

Yeah, if one looks at the standard projections of what's going to happen to the populations of the rich world, between the 30 years from now and 2050, there's going to be about 100 million more people over 65. Standard demographic pyramid has about three workers for every person over 65, but the falling birth rates are shrinking the population of the labor force but not the population of the aged, so we would need about 300 million more workers to sustain our existing social contract to support the taxes that support the aged, but we're not going to have 300 million more workers at current birth rates. We're going to have 142 million less, which means we're just moving into a period in which the inversion of the demographic pyramid is going to mean we're going to have a lot more aged relative to the labor force age, just at levels that have never before

been seen in any human population or in any human history. In the zero migration scenarios, you would move to situations where it would be essentially one worker per retiree, and that's just completely economically impossible. So, something has to happen to address this aging, and the scarcity of labor forced age that is going to be the consequence of the reduced birth rates.

Michael Klein

Going back to the issue of technology and the scarcity of labor, you talk about in your Foreign Affairs article an example of self-driving trucks as an example of sort of a strange response to an absence of truck drivers. Can you talk a little bit about that?

Lant Pritchett

Yeah, it's just a great illustration where the scarcest resources on the planet, which are high-level scientific and technological knowledge and entrepreneurship, are economizing on something that's globally abundant. The number of people in the world that would drive trucks in America if they were legally allowed to is enormous. But, since they're not allowed to, the Elon Musks and Jeff Bezos and Larry and Sergey of Google are all working on developing technology of self-driving, but they're driven to that by the lack of available labor. This isn't a natural technological impulse. There's nothing intrinsically happening in technology that would lead to this. This is the response to their inability to satisfy their demand for workers, but there isn't a global scarcity of workers or truck drivers. It's an artificially created scarcity by lack of, again, legal mechanisms for people to move from other countries and drive trucks in America.

Michael Klein

So that speaks to the advantage in America of allowing people in. What about the advantage to those potential American truck drivers who are living abroad? They would benefit as well, correct?

Lant Pritchett

Oh, and as you said in the introduction, I'm a development economist. I've worked most of my career on how can we make people better off, and how can we increase their productivity, and the wage differential between truck drivers in most of the world and that in the US is at least four to one. And the reason it's four to one is that truck driving is just a more productive value producing activity in a rich, highly productive country than in a poor country. So just by allowing these workers to move, it creates gains to them that are just enormous relative to anything else on the development agenda. There's no development project or program that can increase people's wages by a factor of four, but allowing them to move from a low productivity to a high productivity place does it instantaneously.

Michael Klein

So let's unpack that productivity change. It has to do, I imagine, with both the fact that the trucks and the roads are better, but also what they would be hauling has higher values. Is that correct?

Lant Pritchett

Exactly. It's just, you know, if you look at the productivity, it's a productivity in a value sense. Even if you drive the exact same number of truck miles, the value of moving things from here to there is just higher in a highly productive, than a low productivity economy. So, you know, we kind of imagine sometimes, if you only look at wages within a country, you might think that people's wages are determined by their skills. But really people's wages across countries are determined by their skills, and the productivity of the place they're in. And hence, by allowing people to move to a place in which they're moving higher value products, even with the same truck driving skills, their wages can be up. And it's not a charity thing. No one's giving them more than what their, in fact, productivity justifies. It's their productivity is higher. So that's, that's why I sometimes refer to allowing someone to come to work to America as the least you could do for them. I mean, we're spending money on development projects that are much less effective than just allowing people to move to productivity.

Michael Klein

In the previous conversation we had on EconoFact Chats, you made a statement that I found very striking that there aren't poor people, but there are places where poor people live.

Lant Pritchett

Right.

Michael Klein

And by that, you meant that it's not that people are poor, but people aren't inherently poor by their own abilities or whatever, they just happen to live in places where they cannot become better off. And I guess you spoke to that a little bit already, but can you expand on that a little bit, please?

Lant Pritchett

Yeah, I think one of the, one of the main things we've learned in development economics is for whatever reasons, and there are a variety of theories, is that many countries are just trapped in low productivity growth. They have big productivity differentials of the type we economists call total factor productivity. And these total factor productivities mean an equivalently skilled worker just has lower marginal product in a low TFP place than a high TFP place. And these TFPs, these productivity factors, haven't converged. So, it's very hard to get countries to improve their productivity. But what is potentially very easy is to allow a worker to move from a low

productivity place to a high productivity place. So people have the core skills to do many jobs, but doing those jobs in a low productivity place is low wage, whereas having the same skills and doing those jobs from checking out groceries to home healthcare to trucking is just enormously more productive in the high productivity place. So it's the productivity of places. And poor people are often not poor because they make poor choices, but they're poor because they have poor choices.

Michael Klein

I guess, you know, you and I have been thinking about this our entire professional lives. But for many of our listeners, we should stress that this idea of being more productive means that you're paid more. So higher productivity translates to better wages.

Lant Pritchett

Right.

Michael Klein

I also like to pick up on something else you just sort of mentioned almost in passing. We've been talking here about technology that is substituting for people. But there are a lot of jobs where you can't automate it. For example, home healthcare workers, or personal care aides, and those are jobs that are not being filled now by native foreign people in many industrial countries. But I guess there's scope for people to move to industrial countries, to richer countries and perform those jobs.

Lant Pritchett

Exactly. I think people are trying to automate and create technology, but there are some things that are just technologically resistant. And one thing we've seen in the polarization that David Autor of MIT talks about, apparently what he calls the 'dumbbell hypothesis,' is that demand for these, what I call core skill jobs, of things that are non-routine, and are very hard to automate has actually been growing over time. So if you look at the projections of needs for home healthcare workers and personal care workers, which are again, not jobs that domestic workers want, or are going to fill, there's just millions more of those jobs that need to be filled due to the aging of the population than there are available workers. So there's no solution to the scarcity of workers other than allowing more people to come and do those jobs in rich countries. You know, the solutions that just reallocate existing domestic native-born workers from sector to sector are obviously zero-sum. They can't deal with the expanding demand in these sectors, and technology just is nowhere near being able to cope with it, nor should it. I don't know, you know, why are we trying to develop robots that could help your mother or grandmother get dressed in the morning when we have people around the planet who would willingly do that job for the wages that are justified by their productivity?

Michael Klein

You mentioned David Autor. We have a podcast with him where we've discussed this dumbbell effect of the sort of hollowing out of the middle, but there's still jobs in the United States at either end. In fact, Lant, these kinds of jobs are already being done by immigrants, right? One hears about sort of, say, women coming from less developed countries who are serving as home health care aides or personal care aides. And so in a way, this is being done, but it's not being done in any sort of systematic way or policy is not really reflecting the needs. Is that correct?

Lant Pritchett

That is correct. The Labor Mobility Partnerships is working and talking to countries all around the world, and nearly all rich countries are coping with these labor scarcities. The unique thing about the United States is a long land border with a potential source of immigrants from Mexico and Central America. And that means that we have, in America, have dealt with the labor scarcity in part by this tacit allowance of people to work illegally. So we have lots of people who are working off the books. And an analogy I used historically is we're in the late stages of prohibition. In prohibition, the government outlawed the consumption and production and transport of alcohol. But there was really a demand for it. And as long as there was really a demand for it, we just criminalized an otherwise perfectly regulatable, perfectly justified industry. And the only way to reassert more control over alcohol was by making it legal and regulating it like a legal product. So I think there's enormous gains both for the workers and for the economy by acknowledging our need for labor, and creating legal pathways for these workers to come and for employers to hire them, rather than reliance on this tacit, look the other way and not enforce, the law, which creates enormous political pushback.

Lant Pritchett

I'm glad you mentioned the southern border because in your Foreign Affairs article, you also bring up the Bracero program that allowed Mexican workers to come to the United States for seasonal agricultural work. And the program was in place between 1942 and 1964, but then it ended. Can you talk a little bit about that program?

Lant Pritchett

That was a very interesting program because it allowed Mexican workers to move seasonally to work on agricultural products. And it ended as a kind of exogenous decision of the federal government due to politics on the presumption this would benefit native workers. Well, a study by Michael Clemens and co-authors about the end of Bracero shows very clearly that there was no expansion of native born workers in agriculture in the Bracero States versus the non-Bracero States. So in fact, the end of Bracero didn't benefit U.S. workers at all because essentially none were being displaced by this rotational program. And moreover, it makes the case, what happened was farmers responded by changing their crop mix, and farmers responded by

technological change. They said, well, look, if I can't hire people to manually pick this crop, I will change [inaudible] crops and I will change the nature of crops so they can be mechanically harvested. That really didn't benefit anybody in the long run. It didn't benefit domestic workers. It didn't benefit domestic farmers. It just shifted the technology to use less labor.

Michael Klein

So one of the issues about immigration is whether or not native born people are displaced in their jobs by immigrants. And you're suggesting with the Bracero program, there's evidence that that did not happen. More broadly, what's the evidence on the displacement of native born workers by immigrants?

Lant Pritchett

I think more broadly, the evidence is for people coming from low-wage, low-skill countries, they are just not substitutes with native born workers. So in large part, they take jobs that native born workers wouldn't have otherwise taken and hence would have either been replaced by technology or not done at all. So the famous Mariel Boatlift Study of David Card showed that the arrival of a huge number of Cuban immigrants into Miami didn't, in fact, cause any additional unemployment or lower wages for the natives in Miami. And the fundamental question is, do we think of native born workers in America as being substitutes or complements with arrival of low-skill immigrants? And they're just, by and large, not close substitutes. So by and large, there's very little displacement. And in fact, we often ignore the fact that they can be complements. If we had more elder care, if we had more childcare, largely both the nature and magnitude of women's participation in the labor force is often affected by the lack of complementary factors like childcare. And so in some sense, we would have more employment, and there's powerful studies showing this in places that have schemes for childcare workers like Singapore, just enormously higher labor force participation of highly skilled women when they can have the complimentary factors of childcare and housing care and elder care available to them. So it's not only not displacing American workers, it can expand the consistency and intensity of labor force participation of Americans.

Michael Klein

So Lant, you know, all this makes perfect economic sense, but of course, immigration is a hot button political and social issue as well. There is a quote from the Swiss writer Max Frisch about the German guest worker program in the 1960s, where he said, 'we asked for workers and we got people instead.'

Lant Pritchett

Right.

Michael Klein

And then there's this other issue, of course, there are concerns among some that if people come to the country, they could dilute the political power of certain groups if they became citizens and were allowed to vote. You know, you're working for the Labor Mobility Partnership and there are strong economic arguments. But how do you address these political and social arguments when people bring those up? And they say, that's all fine, you know, professor Pritchett, but we're worried about the nature of our country, and the political system of our country.

Lant Pritchett

I think, ultimately, the fact that demographic shift is going to cause an attitudinal shift like this shift we had about women coming into the labor force in World War Two. You would have asked people in 1935 if women should work in factories. No, absolutely not. That's politically impossible. That's socially undesirable. That's impossible. And when the labor market conditions suddenly changed and we needed workers in the labor force, the US government was issuing pamphlets about how to accommodate women in the labor force. And it was a step shift in the labor force participation of women, which never went back to its previous levels. And so in some ways, facts drive attitudes. Second, I think an important part of what we're discussing at LAMP is let's separate the question of who are the future citizens of our country, and who and under what terms and conditions are we going to allow to be legally present on our sovereign territory to perform labor services? I think once we separate those questions, we can have a politically acceptable set of discussions about who is and under what terms and conditions are people on pathway to citizenship, and who are people that are going to be allowed to be here on a rotational basis to perform labor services, which may also, there are almost certainly should be some legal pathway via that mechanism, but it's not automatically assumed. I think once we separate those questions, we can tone down the hot button-ness of the issue and people will recognize this is just an ordinary form of economic and interface, and having people in your country to perform labor services is a perfectly normal thing. And it can be completely accepted as legitimate, but it does have to in some sense, I think be separated from this deep sense of there's a threat to the political and social order from this. And I think by having discussions about who's on the pathway to citizenship and who is going to be allowed in the territory and those being separate discussions that we work out legal mechanisms for, I think we can actually lower the temperature and get to pragmatic solutions.

Michael Klein

Well, America is known as a nation of immigrants. And there are people a generation ago who might not have been considered American in some sense. And yet now they are a very important part of the fabric of the society. So I hope Lant that, you know, your very cogent and good arguments are ones that people listen to. And maybe they'll shift some of these views, because as you say, we are facing a demographic cliff. And there are a lot of challenges. And

you're putting forward ways to address these that I think are quite reasonable. I hope our listeners agree. So thank you very much for joining me today, Lant.

Lant Pritchett

Thanks for having me again.

Michael Klein

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