

EconoFact Chats: The Future of Work

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Michael Klein:

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:

There's a line in the Bruce Springsteen song, My Hometown, "They're closing down the textile mill across the railroad tracks. Foreman says these jobs are going, boys and they ain't coming back." The album in which this song appears, Born in the USA, came out in 1984. Springsteen caught the mood of the country at that time, reflecting concerns about the loss of good-paying, blue collar jobs. Since then, the fate of less educated workers, those without a college degree, who may have been working in factories or in service sector jobs, has only gotten worse. As a consequence, income inequality has risen, and this has been linked to the rise of political populism, and the surge in so-called deaths of despair from suicide, drug overdoses, and alcohol-related illnesses.

Michael Klein:

What has happened to the wages of lower income Americans and why? And what is the future of work in America? One of the foremost economists researching these questions is my guest on EconoFact Chats today, Professor David Autor of MIT. David has published many influential articles documenting the decline in the fortunes of lower income workers. He's co-director of the NBER Labor Studies Program, and co-leader of both the MIT Work of the Future Task Force and the JPAL Work of the Future Experimental Initiative. In 2020, he was presented with a Heinz Award, considered to be among the largest individual achievement prizes in the world. David, welcome to EconoFact Chats.

David Autor:

Thanks very much, Michael. It's a pleasure to be here.

Michael Klein:

So let's start out with some statistics about wage inequality. In the Richard Ely lecture that you gave to the American Economic Association you identified three distinct periods relating to wage inequality over the past half century. What were these, and what happened during them?

David Autor:

Sure. So the first one, in my lecture, I talk about 1963 to 1972, but, in fact, you could start really by the end of World War II to 1972. And that's a period of rapid rising living standards, rising real wages at every education level. And so growth was evenly shared and very quick. It was the fastest period US productivity growth and income growth in our recorded history. Then in 1973, for reasons that economists don't fully understand even today, we were hit by a series of shocks, particularly the oil price shocks. And throughout the Western world, productivity growth slowed dramatically. And in that period, from basically the early 1970s to about 1980, wages stagnated at almost every level. And so we had previously been all growing together. We then all stagnated together.

David Autor:

And then starting around 1980, there was a great divergence in the earnings levels by education, with those with college and post-college degrees seeing a steep, real increases in earnings. And those with high school or lower education seeing sharp falls, particularly among men. And I don't just mean in relative terms, but in absolute terms. And really those four decades, that period starting in 1980, has continued more or less to the present. The inequality has not reversed itself. The earnings of highly educated workers are much higher than they were before. The earnings of less educated workers are somewhat lower. And so it's been a period not just of rising inequality, but falling real earnings levels as we measure them among the majority of adults who do not have a four-year college degree.

Michael Klein:

So I want to emphasize that point. You can think of rising in equality, where people at the bottom are doing better, but people at the top are doing much, much better. But this is actually the people at the bottom are doing worse.

David Autor:

Yes. And that is a big unpleasant surprise. And another way to say it is, the median worker, the person right at the middle of the pack, their real earnings have barely budged in the last four decades, even though the education level of the median worker has risen a lot. In other words, the median worker's not the same person over four decades. They're much more skilled than they used to be. And yet their real earnings, as far as we measure them, haven't risen.

David Autor:

Now, people can quibble about that and say, "Oh, no, no, you're under counting all the productivity gains. You're not adequately accounting for the benefits that have come to our consumer society." And that's possible. It's possible. It's hard to make these comparisons with great confidence. But if we're understating the gain at the median, we're also understating the gain at the top. So the inequality growth would still be real and the divergence of living standards would be equally dramatic.

Michael Klein:

Right. Both the median worker and the rich worker have access to video games now that weren't available in 1980.

David Autor:

Exactly. And air conditioning, and mobile phones, and safer cars, and better medical services. Many, many things have improved. We shouldn't lose sight of that altogether.

Michael Klein:

So in your Ely lecture you point out there are many potential explanations for this. Can you mention some of the candidate causes?

David Autor:

Sure. So I would call them technological, global, and institutional. They all relate. The technological causes would be changes in the structure of jobs, particularly driven by automation and the kind of rapid advances of information technology that have had the effect of kind of hollowing out the middle set of jobs.

Michael Klein:

So what's a real world example of that?

David Autor:

Sure. So if you think of the way office work has changed, 40 years ago you'd have many people answering phones, doing typing, copying, photocopying, duplicating, filing, et cetera. And now, those activities are still done, but they're done by machines. And so in a typical office you have many, many fewer administrative support workers. Those who remain are actually usually highly skilled. They're doing complex tasks. But that was a very important category of work for women without college degrees. For men, you would see a lot of automation in factories, where they've just become much more capital intensive, up to and continuing through robotics. And so the kind of head count in a typical production line has fallen substantially, holding output constant. That's one of the factors, is technological change. That's a very simplified story. There's much more to it.

Michael Klein:

So people say that in steel mills, the only workers left are the custodians.

David Autor:

Yeah. That's a dramatic way of putting it, but definitely there are more robots than auto workers on the typical auto assembly line at this point, for example.

Michael Klein:

Right. So that's one reason, technological change. What are some of the others?

David Autor:

Well, the second would be globalization. The US, in particular, is much more integrated with the world economy than it was four decades ago. NAFTA, which was passed in 1994, actually did have a fairly substantial consequence on the counties that were most exposed to Mexico's exports when the tariffs fell. And then China's rise from 1990 to the present, particularly after 2000, when China joined the World Trade Organization and got permanent 'most favored nation trading' status with the US; has been traumatic for US manufacturing employment. Led to the loss of at least a million jobs, typically in pretty short order, pretty geographically concentrated way, in a lot of labor intensive manufacturing, like textiles, shoes, and a lot of assembled products.

Michael Klein:

So you're very well known for your China Shock paper, and that's had a really big influence in the profession. And one of the things that I found really striking about that is, as you mention, it was very geographically concentrated, as were the effects of NAFTA. And so there's sort of a multiplier effect for a community as a whole when it loses jobs. It's not like the job losses were evenly spread, but when a community loses a large number of jobs, they lose their tax base, they start to have more and more kinds of problems with the lack of public finance and so on. So it's really permeating the entire society of these small communities, right?

David Autor:

Absolutely. And it's not even just the economic forces. Jobs are kind of an anchor of an organizing principle of adult life. They give you a purpose. They shape your day, a community, friends, esteem. And when people lose work, they don't just lose the income, although they lose that, they lose many of those

other valuable social anchors. And you see an increase in depression, a decline in marriage rates, a growth in kids growing up in poor households. And you even see an increase in what Anne Case and Angus Deaton have referred to as 'deaths of despair,' so premature deaths having to do with drug and alcohol addiction and other sort of avoidable causes of death.

David Autor:

So you see just a lot of social disarray in places where work disappears. And when I say when work disappears, I'm using the famous phrase by the sociologist, William Julius Wilson, who wrote about the decline of inner city manufacturing and the impact that had on African Americans in an earlier generation.

Michael Klein:

So along with Deaton and Case, his co-author, and Wilson, the great social scientist, Bruce Springsteen would agree with you, too, I suppose.

David Autor:

Yes. I haven't studied his work as closely, but I know others know it well.

Michael Klein:

Yeah, I know it pretty well. So I spent much of my college period studying more Springsteen and less economics than probably I should have. What about the role of unions?

David Autor:

Sure. I've talked about two forces, which are technological change, particularly automation, and globalization, but institutional changes have been quite important. And all of these things interact. I want to underscore they're not, cannot be separated. We've seen a dramatic fall in the representation of workers in labor unions, in the private sector. And that's both within and outside of manufacturing. In addition, the real value of the minimum wage has consistently eroded, except for brief periods where democratic presidents managed to raise it. But the federal minimum wage, at present, is at about the same real value as it was in 1950, 70 years ago. You would hope it would actually just rise at least at the rate of kind of productivity growth, but no.

David Autor:

So, and then there's been almost no progress in any of our kind of social protections or regulatory apparatus that help improve the quality of work, so the Fair Labor Standards Act, the Civil Rights Act, the Occupational Safety and Health Act. And so social policy has largely been in this standstill in the United States for at least four decades, when many other advanced nations have sort of improved on these dimensions. And the institutions that most directly protected workers, or supported workers, have eroded tremendously. So workers have less bargaining power even at profitable firms, even in places where there's lots of resources potentially to go around.

Michael Klein:

So in terms of the future of work, a focus of your Ely lecture is what you call the barbell effect. Can you explain what that means?

David Autor:

Sure. And I had alluded to this earlier. So if you sort of arrange occupations on a kind of a line from lowest paid to highest paid on average, so the lowest pay would be kind of personal services and agriculture, highest pay would be professional, technical, and managerial work, the occupational distribution in the US added many other industrialized countries, increasingly, it looks like a barbell with growing weight on either end of the bar. On the right hand side, we have increased employment in professional and technical managerial work. These are highly educated, high-paid, creative jobs. And they're growing. It's great news for people who have college degrees.

David Autor:

At the bottom, we have a lot of personal services, food service, cleaning, security, entertainment, recreation, home healthcare, home health aides. Those are typically low educated jobs. They pay low wages. They're insecure. And the people who are doing them are often using what you might call somewhat generic skill sets. They're not highly specialized. Many people could do food service, or cleaning, or security with a modest amount of training, which means those jobs tend not to pay well, because the skills are potentially abundant.

David Autor:

What has declined is jobs in the middle, in production and operative positions, partly having do technology, partly having to do with trade, and in administrative support, clerical and sales. Many of those were middle educated, middle wage jobs done by people with a high school education or some college, -- not necessarily a four year degree -- and they were the kind of middle class occupations for people who weren't either in high paid manufacturing or weren't entering the professions. And their decline has caused this kind of polarization, the movement of the mass out to the two ends. And so increasingly we have one group of people who were doing interesting work and being well remunerated. And another, a growing set that are in relatively economically insecure positions that don't have much of a career ladder.

David Autor:

If you're working in food service, or doing checkout, or cleaning, after six months or something, you might reach peak productivity. Your experience isn't especially valuable to the employer. You don't get that much better at it. And that means they won't tend to pay you more over the life cycle, because you're just competing with someone else who could do the job, come in young and within a few months be as good as you are. And that's not the case in the professions, for example.

Michael Klein:

We had talked about a geographic component to this. And we talked about it in terms of your work on the China Shock in these rural communities, but is there also a geographic component for what's going on in urban areas? And can you explain a little bit what job opportunities looked like for people without a college education 50 years ago in urban areas, and compare that to what they look like now? And how is this different from rural areas, or maybe even sort of suburban or small urban areas, like for example, Freehold, New Jersey, the hometown in the Bruce Springsteen song?

David Autor:

Yeah. So thanks for that question. This is really, it was the subject of the 2019 Ely lecture, to which you referred. And that work studies sort of the geography of polarization. And what I kind of discovered that very much surprised me was that most of the middle skilled work done by non-college workers was found in cities, particularly in offices, to some degree in production, work 50 years ago. And there was a kind of distinct urban occupational structure, where people without high levels of formal education would move

into middle skilled jobs and get paid relatively well. Arguably, they were working alongside highly educated workers in offices, managers in factories, and so on. And that was a distinct set of opportunities.

David Autor:

So wages are higher in cities. Probably they're higher to compensate for the cost of living, but employers must find it productive to be there, or otherwise they could move somewhere else. And both college and non-college workers seem to earn considerably more in cities. After the 1980s, we see a change. The urban wage differential for highly educated remains steep and get somewhat steeper. The urban wage differential for non-college workers actually gets shallower and shallower. So it's almost flat, meaning that the difference between a urban worker, without a college degree, and a suburban worker, or a even a rural worker, is not very large anymore.

David Autor:

That has happened as the job structure has changed in urban area areas. That middle skilled stratum of work, that office work, the factory work, has eroded such that increasingly cities are bifurcated in the way I described earlier. On the one hand you have lots of people in finance, and management, and technical fields. And then most of the non-college workers are basically doing service work. They're driving cars. They're fixing buildings. They're constructing things. They are serving food. They're working at bars. And they're no longer kind of working at the same establishments or jointly producing with those highly educated workers. And so the polarization that we see in aggregate, in many senses, to a substantial degree reflects the kind of unwinding of this special urban labor market, where non-college workers moved into higher paying jobs that had more upward mobility. That is what has declined.

Michael Klein:

So we haven't talked about the widening racial and ethnic wage gaps. Is what you're describing in urban areas linked to this widening racial or ethnic wage gap as well?

David Autor:

Yeah. This is a question I worked on for the MIT task force on the Work of the Future, one of the briefs we wrote. And it turns out that that polarization, urban polarization-- decline of the middle -- has been even more pronounced for minority workers. And, of course, minorities are overrepresented in urban areas, so Blacks and Hispanics. And so we see a greater hollowing out among those groups. They're overrepresented in cities and their relative wages have fallen by more.

David Autor:

So in general, the polarization has been adverse, particularly for minorities because they tended to be more represented in the middle. The good jobs for often a highly educated minority household might be someone working in manufacturing or doing office work. And so those jobs have substantially declined. And then that was particularly true in urban areas. And then within urban areas, it's particularly true for minorities in those areas. So these all point, unfortunately, in the same direction and not a good direction.

Michael Klein:

What's the role of immigration here? I imagine immigrants tend to settle more in urban or metro areas than in rural areas. Although I know also there is a tendency for people from one area or region to follow others. So for example, Utica, New York has an overrepresented of a particular ethnic or national group. What's going on with the future of work in immigration?

David Autor:

Yeah. So I looked at this question in the sort of the urban context and I found this kind of polarization and the decline of middle skilled work is pretty prevalent among all groups. Among minorities, among non-minorities, among native born, among foreign born. It's more pronounced among immigrants and minorities than among native born Caucasians, but it appears to be comparable, similar, in any case. So it's not that immigration, per se, is pushing one group out and another group in or anything of the sort. It seems to be fairly pervasive. So I don't see immigration as a cause of the phenomenon I'm describing, but certainly immigrants have been affected or, even could say, afflicted by it.

Michael Klein:

So David, you've done an amazing amount of comprehensive research on these issues. And what we've been discussing was what was happening pretty much before the pandemic. Those are the data that you have available. Do you have any sense of how all these results might have changed over the past year and a half with the disruptions to the labor market due to the pandemic? And if that's the case, how durable do you think those changes will be? Or, put differently, will the pandemic affect the work of the future?

David Autor:

Yeah. Great question. And the data are coming in very fast. Certainly the pandemic has created all kinds of surprises and paradoxes that we're only beginning to understand. So I anticipated that when the pandemic ended, not that it's fully ended, there would be excess labor supply. Many people wanting their jobs back in urban areas and those jobs not coming back, because of a decline in tourism, a decline in commuting. Some of that's happening. That's happening in Manhattan. But to a large extent, we're in a period of labor scarcity, where fewer people are working, but those who are working are demanding higher wages. And worker activism is at a post-war high. And just as important, the wages are rising at the bottom of the wage distribution much faster than other places.

David Autor:

So we're all aware that inflation is growing. So it eats up a lot of that, but real wages in food service and hospitality are rising about 12% per year. Inflation is running about 6% per year. So that's a big change. I don't know how durable it will be, but I'm hoping it will endure, because this scarcity creates some forces for rebalancing; for rebalancing the bargaining power of different groups and for giving an opportunity for employers to have to work harder to attract people to do jobs that are not glamorous, but need to be done, and which could potentially pay higher wages.

David Autor:

It will make them cost more. It will cost more to go out to restaurants. It'll cost more to go to hotels. If you go to a hotel, if you've been to one recently, you'll notice that they don't typically clean your room every day anymore, unless you want to pay extra for that. That's a reflection of the change. But at least that aspect of it, I view as a positive, the labor scarcity.

Michael Klein:

So David, the title of this episode is The Future of Work. Now, the future of work is not just determined by economic forces, but political forces as well. What kind of policies could be put in place to help sort of the missing middle, the people that you described as no longer having opportunities for good middle class jobs? Are there things that the government could do to help that? Or is that something where the economic forces are just too strong, and the government really couldn't buck that trend?

David Autor:

No. There are definitely things that we can do collectively. And that's not just a hypothetical, because if we compare ourselves to other industrialized countries that face the same forces of technological change, globalization, rising education levels, shrinking, falling birth rates, they've done much differently. And the degree of inequality -- of earnings and opportunity -- that we see in other high-income countries is much lower than it is in the United States. So what could we do in the US? Well, you could sort of think of kind of three buckets of policies. One are things about skills, investing in people to allow them to get better jobs. Of course, we need to do that, but that's a long-term solution. It's not going to do it on its own.

David Autor:

Another thing we can do is tax and transfer. That's an economist's favorite thing to do. I think that has limited scope. People don't want to lose their jobs and just receive a check in its place. That's doesn't make people feel good about the work they're doing. A third is essentially trying to intervene to improve the quality of work. How do we do that? Some of it is through minimum wage regulations. Some of it's through labor standards, expectations about, is health insurance expected? Do you get paid vacation and sick leave? Some of that will create costs. Employers will respond by having to make those jobs more productive. And then some of it has to do with policy that we use to foster investment.

David Autor:

For example, if the Biden administration passes the Build Back Better bill, that will actually create a lot of middle class work in retrofitting the United States for a new energy transmission system, for example, supporting childcare work, and a variety of things. So we shouldn't think that these things are out of our hands. There are market forces and they have a lot of leverage, but we also shape them to an important degree. And we even shape the direction of technological change by creating incentives. And the technologies that we get that affect work so much, they don't just show up because people sitting on a lab bench go, "Eureka!" They face incentives for what to develop, what R&D systems does the US support? What universities work on. And so there are many ways that we shape not just the distribution of income, but the set of opportunities and skills that are needed and created for people throughout the economy.

Michael Klein:

Well, this is one of the most important questions facing the country. And I very much appreciate you sharing your insights and drawing on your expertise and your research to discuss this with me today, David. So thank you very much.

David Autor:

Thank you very much for having me. It was a pleasure speaking.

Michael Klein:

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