

General Discussion: The Impact of Trade on Inequality in Developing Countries

Chair: Susan M. Collins

Mr. Furman: I thought that it was a terrific paper and really nuanced and insightful. I think a lot of this discussion, especially when you're translating into policy, would benefit from sharper distinctions about three different issues. One is, are we talking about uneven or unequal? Uneven could be 10 percent of the population loses, 90 percent gains. That 10 percent, we don't know where they are on the income distribution. Unequal says people at the bottom lose, and people at the top gain and those have different policy implications. I think a lot of what you were talking about was actually uneven. The title of the paper focused more on inequality.

The second is the labor side versus the consumption side. We know that the consumption side is enormously progressive. I think that's more so in advanced economies and developed, if you look at the Fajgelbaum and Khandelwal paper, the United States at the 10th percentile, your income is boosted 69 percent by trade; in India at the 10th percentile, it's only boosted 19 percent by trade. So, maybe those different effects on the consumption side.

Then the third is a sharper distinction, which also matters for policy. Are we talking about trade liberalization or are we talking about expanded trade? India in 1991 made a set of policy changes. A lot

of what I think the China shock literature is about is a set of policy changes made to China's domestic policies that resulted in them exporting more to the United States. We didn't change tariffs on China at all when they entered the World Trade Organization—so, distinguishing between trade policy and international development.

Mr. Obstfeld: Yes, great paper and very illuminating comments as well. David Dorn mentioned the very interesting and striking divergence in views about trade across, broadly speaking, emerging and developing countries versus advanced countries, and this despite the fact that the unevenness of trade's effects, as Nina Pavcnik indicated, is quite similar. If you look at the Autor, Dorn and Hanson results and you look at the results in Brazil and other countries, you see these uneven effects. I think one reason for these different attitudes is that many emerging markets by and large followed the advice of Western economists in liberalizing and opening up, and they initially were at a greater distance from the global frontier. So there's much more room for convergence than advanced economies had. In fact, many economies, including the most populous, have converged quite a bit and shown large income increases in per capita terms, despite the fact that inequality levels there tend to be much higher than in most advanced economies. But this growth has trickled down; even the lowest deciles have experienced substantial increases. So, despite the distributional effects, there seems to be some sense that growth has actually been good and in a very significant way in the aggregate.

Having said that, despite the fact that you have global convergence in population-weighted terms, there actually are a large number of very small countries generally which have not converged, which are not converging, and where growth is much more problematic.

Ms. Mann: I was struck also by what is really quite a similar story between developing countries, emerging markets and the advanced countries. I think that is one of the things that came out in both of your remarks, and it's interesting because we usually think, "Oh, they've got to be different."

Another dimensionality that is increasingly important is the regional element of the work (a consequence of now having much

better regional data as a lens). So with regard to the regional aspect, manufacturing has a supplier network. Sometimes that network is abroad; sometimes it is internal to the region, and generating agglomeration economies. At some point, the regions with firms in the manufacturing sector have done extremely well, better than average. But, when the core plant disappears, that region does worse than average. So the delta on the regional behavior or the regional outcomes is from better-than-everybody-else to worse-than-everyone-else. So that's an element of the regional story that is important to note.

Then the next question is: If it is the case that the region goes from being better than average to being worse than average, why isn't there some mechanism that will allow the region to use the "good times" to self-insure in some way by diversifying the job base so that when the inevitable creative destruction takes place they are not left high and dry?

Mr. Klenow: This is related to Maury Obstfeld's comment. The presenter and discussant have both been part of this body of really impressive work that's documenting more and more carefully what I would call the static effects—the unemployment and earnings. And related to Maury's comment, I'm thinking about how does it speed technology transfer, how does it change the scale of the market for firms in ways that might affect incentives to innovate? Is that really hard to get at because it's delayed? But it seems, because some of the theory models are saying those dynamic gains can be much bigger than the static gains, like even though they're hard to get at, it should be a priority to try to estimate those in the future.

Mr. Van Reenen: Well, this fits very well with the previous comments. I was going to re-emphasize what Pete Klenow said. I think there are increasing numbers of papers now looking at what the impact of things like Chinese trade is on innovation and productivity. Some of the work that I've done with Nick Bloom suggests positive effects of those; David Dorn has done some work in the United States with dozens of effects and which actually finds different results. Very much like what Nina Pavcnik was saying, there may be heterogeneous effects of trade on productivity innovation depending on the country in specificity that you look at.

The second point I'd like to make is, I'm part, and we're all part, of this microeconomic new approach to trade, focusing on regional variation and industry variation. But I do worry a lot, as Catherine Mann said, that it might miss out these positive general equilibrium effects. So the industries which benefit from trade because they can purchase imports more cheaply, the areas which can export more and so on. Those are often harder to pick up in the data because of the second order spillover effects. But I think the aggregate effects may well overwhelm these negative local effects. We really have to do a much better job in trying to pick them up in the work as we do going forward.

Mr. Spriggs: All of this work has really been great because it does help to give people a metric for understanding the cost of trade. It's very fascinating to hear this idea that we should have figured out how to compensate the losers better, but we still haven't moved an inch on that. But in the case of the United States, you have a different problem and it seems to be a problem for central bank activity in the United States, which is this isn't trade in the United States in many instances; this is just the relocation of manufacturing. In the expansion of 2000, the United States lost manufacturing jobs. Everybody wants to use the percent of people in manufacturing as a metric; that's irrelevant. The point is we lost manufacturing jobs. Workers being paid by U.S. manufacturers did not go down that much because U.S. manufacturers increased employment in China by 46 percent. If you look at it from the perspective of what did U.S. manufacturers do, they didn't lose as many jobs. American workers lost jobs, not U.S. manufacturing. Where do you move to if you're a manufacturing worker because it's kind of hard to say where were the gains in manufacturing given that manufacturing jobs went down while they were going up in China because of investment shifts. And if you're a central banker, how do you deal with an actual decline in capital, and where do we get the capital reallocation, and how do you move the capital reallocation? These are important parts, I think, of thinking through what are the policy responses from the central bank to a loss of physical capital that doesn't and can't be reallocated to other sectors that easily?

Finally, I think we need to stop saying that Americans have benefited because we have lower prices. Real wages in the United States have been stagnant. Real wages. We've already included whatever prices were going to do. You're offering a very weird hypothetical that inflation would have been higher but wages wouldn't. This is kind of a weird hypothetical to offer to people. Real wages in the United States have not gone up, so telling me that prices have gone down isn't informative.

Mr. Romer: First, I want to echo the people who applaud the paper. I thought it was really nicely done. And I think the discussion at the end of how to actually deal with this, and why writing checks to people is probably not feasible, nor politically palatable, nor what people want, was important and on-target. I also want to pile on about the point that general equilibrium effects are really important, and about the importance of what you said at the end about protectionism not being the answer. I don't think you disagree with any of this, so I think the issue is largely an expositional one. But I wanted to add one other general equilibrium-like channel in the context of developing countries that may be even more important than the ones that people have discussed, which is that trade liberalization is almost always part and parcel of a broader liberalization of the economy involving it moving away from central planning and heavy government involvement to much more market-based systems. I think the evidence is pretty clear that in many countries, those changes have had absolutely enormous impacts on standards of living. So I think that leaving those considerations out of a discussion of liberalization and focusing just on the differences may be missing something very large.

Mr. Rogoff: I have to start out by saying it was an excellent paper and an excellent discussion, and I would certainly underscore the point about how the effects are parallel to those in developing countries in many ways. I want to make two points. One is that before this research program started, a long time back—remember, we had trade with Japan long before trade with China, and there were actually many similar effects. I grew up in Rochester, New York, which was basically gutted by trade with Japan. Back in the 1950s and 1960s, Rochester was one of the couple richest cities in the country; it's

now way down on the list. Rochester had Kodak, Bausch & Lomb and Xerox, but each got slaughtered by the likes of Nikon, Canon and many other Japanese competitors. Today, Rochester is the home to the Amazon Cloud; there are many empty buildings that have computer centers but not many workers. You can say the same thing about Buffalo and steel. Upstate New York in general, and has never come back. I mean, it's really quite striking, the long-run effects. There is sort of a more general question about dynamism and economy. We can go back further. The invention of air conditioning led to a gigantic migration of manufacturing from the North to the South, with Massachusetts getting hollowed out. Its manufacturing base was lost to the South. How do we think about that? I think you do have to look at the general equilibrium effects, the point Catherine Mann made about how when a region is really rich it should invest. It underscores we live in a volatile world; and how important it is to invest in education.

Mr. Henry: Excellent papers, excellent comments. I just want to add a couple of things to what David Romer said and connect them to what Ken Rogoff said. The facts are, if you look at emerging and developing countries from 1980 to 1994, they grew at 3.5 percent per year. From 1995 through the financial crisis, they grew at 5.5 percent per year. Part of that increase in growth is trade liberalization, but it is also stabilization, FDI and a range of other things. Another really important point is that advanced economies did not grow any more slowly over those two periods. To your point, growth is not a zero sum game. It's very clear in the data. It's also important to note that the more rapid growth in emerging markets obviously played a big role in the recovery of advanced economies, and it's actually not the central banker's job, to Bill Spriggs' point, to actually think about so much the distributional effects. That's the job of leaders and policymakers. So central banking and monetary policy, that's beyond the ambit. Particularly as we think about trade adjustment assistance, to David Romer's point and Ken Rogoff's point, we often think about geographical mobility which is probably the wrong way to think about things at the current point in time. We need to think about educational ability because geographical mobility is not going to help somebody who doesn't have the skills to do the work.

Thinking about trade adjustment assistance from the point of view of just transferring income, again to David Romer's point, very consistent with the rise in mortality and the fall in healthy outcomes for U.S. males; transferring income doesn't solve that problem. You need to give skills, and you need a lot of people to be mobile in an economic and educational sense.

Ms. Pavcnik: Thank you very much for all these great comments. I will respond with a couple of broader comments. Several of you suggested that we have to be careful about uneven versus unequal effects of trade, other sources of gains from trade, and the distinction between trade policy versus expanded trade opportunities. In the paper, I discuss in greater detail whether or not inequality increased or decreased, and whether or not the poor versus richer were more or less affected by a particular trade policy episode in a specific country. All of these points suggest the importance of analyzing the effects of trade shocks within a specific country's context. For example, in Brazil, the import trade liberalization episode actually lowered inequality because more affected regions tended to be richer to begin with. In Vietnam, on the other hand, inequality actually increased across regions with export trade liberalization, but the reform did help the poor. I agree that consumption gains from trade are important, and we have good evidence on aggregate about their contribution. A bigger challenge, going back to a point that Bill Spriggs made, is that we don't know whether or not consumption gains from trade overcome the negative employment effects for individuals living in geographical areas that are disproportionately hurt by import competition. That's a good, open question.

General equilibrium effects of trade are important. One great thing about international trade literature is that the more empirical literature on consequences of trade speaks with a theory literature, which in turn generates theory models that encompass some of the labor market or firm-level features that empirics encounter. In turn, quantitative trade models are produced that can encompass and quantify the general equilibrium effects of trade. Pete Klenow and John Van Reenen, emphasize the studies, and I've contributed to that literature as well, that documents productivity and innovation gains from trade

in developed and developing countries alike. The challenge is that these gains tend to be concentrated in certain types of manufacturing firms, but we need more information on how these gains spread more broadly within countries. And this is where geographic distinctions play a role.

The final point I want to make relates to a point that Peter Henry made. I agree that educational mobility and equality of education opportunity is probably the No. 1 concern. In the paper, I illustrate for the case of India that schooling decreased in areas of India that were hard hit with import competition, in part because poor families couldn't afford schooling costs when their incomes decreased. You don't necessarily need a very expensive intervention to reduce those schooling costs. There's wonderful research done by labor economists that focus on education on how to provide more equal opportunities to education. This suggests that international trade economists, macroeconomists, labor economists, all have to work together to find solutions to these difficult problems. Thank you.