

Augie Picado at TED@UPS: **The real reason manufacturing jobs are disappearing**

When someone mentions Cuba, what do you think about? Classic, classic cars? Perhaps good cigars? Maybe you think of a famous baseball player. What about when somebody mentions North Korea? You think about those missile tests, maybe their notorious leader or his good friend, Dennis Rodman.

5 (Laughter)

One thing that likely doesn't **come to mind** is a vision of a country, an open economy, whose citizens have access to a wide range of affordable consumer products.

10 I'm not here to argue how these countries got to where they are today. I simply want to use them as an example of countries and citizens who have been affected, negatively affected, by a trade policy that restricts imports and protects local industries. Recently we've heard a number of countries talk about restricting imports and protecting their local, domestic industries. Now, this may sound fine in a **sound bite**, but what it really is is protectionism. We heard a lot about this during the 2016 presidential election. We heard about it during the Brexit debates and most recently during the French elections. In fact, it's been a really important topic being talked about around the world, and many aspiring political leaders are running on platforms positioning protectionism as a good thing.

15 Now, I could see why they think protectionism is good, because sometimes it seems like trade is unfair. Some have blamed trade for some of the problems we've been having here at home in the US. For years we've been hearing about the loss of high-paying US manufacturing jobs. Many think that manufacturing is declining in the US because companies are moving their operations offshore to markets with lower-cost labor like China, Mexico and Vietnam. They also think trade agreements sometimes are unfair, like NAFTA and the Trans-Pacific
20 Partnership, because these trade agreements allow companies to reimport those cheaply produced goods back into the US and other countries from where the jobs were taken. So it kind of feels like the exporters win and the importers lose.

25 Now, the reality is output in the manufacturing sector in the US is actually growing, but we are losing jobs. We're losing lots of them. In fact, from 2000 to 2010, 5.7 million manufacturing jobs were lost. But they're not being lost for the reasons you might think. Mike Johnson in Toledo, Ohio didn't lose his jobs at the factory to Miguel Sanchez in Monterrey, Mexico. No. Mike lost his job to a machine. 87 percent of lost manufacturing jobs have been eliminated because we've made improvements in our own productivity through automation. So that means that one out of 10 lost manufacturing jobs was due to offshoring. Now, this is not just a US phenomenon. No. In fact, automation is spreading to every production line in every country around the world.

30 But look, I get it: if you just lost your job and then you read in the newspaper that your old company just struck up a deal with China, it's easy to think you were just replaced in a one-for-one deal.

When I hear stories like this, I think that what people picture is that trade happens between only two countries. Manufacturers in one country produce products and they export them to consumers in other countries, and it feels like the manufacturing countries win and the importing countries lose.

35 Well, reality's a little bit different. I'm a supply chain professional, and I live and work in Mexico. And I work in the middle of a highly connected network of manufacturers all collaborating from around the world to produce many of the products we use today. What I see from my **front-row seat** in Mexico City actually looks more like this. And this is a more accurate **depiction** of what trade really looks like. I've had the pleasure of being able to see how many different products are manufactured, from golf clubs to laptop computers to internet servers,
40 automobiles and even airplanes. And believe me, none of it happens in a straight line.

Let me give you an example. A few months ago, I was touring the manufacturing plant of a multinational aerospace company in Querétaro, Mexico, and the VP of logistics **points out** a completed tail assembly. It **turns out** the tail assemblies are assembled from panels that are manufactured in France, and they're assembled in Mexico using components imported from the US. When those tail assemblies are done, they're exported via truck
45 to Canada to their primary assembly plant where they come together with thousands of other parts, like the wings and the seats and the little shades over the little windows, all coming in to become a part of a new airplane. Think about it. These new airplanes, before they even take their first flight, they have more stamps in their passports than Angelina Jolie.

50 Now, this approach to processing goes on all around the world to manufacture many of the products we use every day, from skin cream to airplanes. When you go home tonight, take a look in your house. You might be surprised to find a label that looks like this one: "Manufactured in the USA from US and foreign parts."

Economist Michael Porter described what's going on here best. Many decades ago, he said that it's most beneficial for a country to focus on producing the products it can produce most efficiently and trading for the rest. So what he's talking about here is shared production, and efficiency is **the name of the game**. You've probably
55 seen an example of this at home or at work.

Let's take a look at an example. Think about how your house was built or your kitchen renovated. Typically, there's a general contractor who is responsible for coordinating the efforts of all the different contractors: an architect to draw the plans, an earth-moving company to dig the foundation, a plumber, a carpenter and so on. So why doesn't the general contractor pick just one company to do all the work, like, say, the architect? Because this
60 is silly. The general contractor selects experts because it takes years to learn and master how to do each of the tasks it takes to build a house or renovate a kitchen, some of them requiring special training. Think about it: Would you want your architect to install your toilet? Of course not.

So let's apply this process to the corporate world. Companies today focus on manufacturing what they produce best and most efficiently, and they trade for everything else. So this means they rely on a global, interconnected, interdependent network of manufacturers to produce these products. In fact, that network is so interconnected it's almost impossible to dismantle and produce products in just one country.
65

Let's take a look at the interconnected web we saw a few moments ago, and let's focus on just one strand between the US and Mexico. The Wilson Institute says that shared production represents 40 percent of the half a trillion dollars in trade between the US and Mexico. That's about 200 billion dollars, or the same as the GDP for Portugal. So let's just imagine that the US decides to impose a 20 percent border tax on all imports from Mexico. OK, fine. But do you think Mexico is just going to stand by and let that happen? No. No way. So in retaliation, they impose a similar tax on all goods being imported from the US, and a little game of **tit-for-tat** ensues, and 20 percent -- just imagine that 20 percent duties are added to every good, product, product component crossing back and forth across the border, and you could be looking at more than a 40 percent increase in duties, or 80 billion
70 dollars. Now, **don't kid yourself**, these costs are going to be passed along to you and to me. Now, let's think about what impact that might have on some of the products, or the prices of the products, that we buy every day. So if a 30 percent increase in duties were actually passed along, we would be looking at some pretty important increases in prices. A Lincoln MKZ would go from 37,000 dollars to 48,000. And the price of a Sharp 60-inch HDTV would go from 898 dollars to 1,167 dollars. And the price of a 16-ounce jar of CVS skin moisturizer
75 would go from 13 dollars to 17 dollars. Now, remember, this is only looking at one strand of the production chain between the US and Mexico, so multiply this out across all of the strands. The impact could be considerable.
80

Now, just think about this: even if we were able to dismantle this network and produce products in just one country, which by the way is easier said than done, we would still only be saving or protecting one out of 10 lost manufacturing jobs. That's right, because remember, most of those jobs, 87 percent, were lost due to
85 improvements in our own productivity. And unfortunately, those jobs, they're gone for good. So the real question is, does it make sense for us to drive up prices to the point where many of us can't afford the basic goods we use every day for the purpose of saving a job that might be eliminated in a couple of years anyway?

The reality is that shared production allows us to manufacture higher quality products at lower costs. It's that simple. It allows us to get more out of the limited resources and expertise we have and at the same time benefit
90 from lower prices. It's really important to remember that for shared production to be effective, it relies on efficient cross-border movement of raw materials, components and finished products.

So remember this: the next time you're hearing somebody try to sell you on the idea that protectionism is a good deal, it's just not.

Thank you.