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Robert Koopman on global value chains and the WTO  
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(MUSIC)

DOLLAR: Hi, I'm David Dollar, host of The Brookings Trade Podcast, Dollar & Sense. Today our topic is global value chains and my guest is Bob Koopman, chief economist of the World Trade Organization.

Welcome, Bob.

KOOPMAN: Thanks, David. Great to be here.

DOLLAR: Bob and I are involved in a big research project on global value chains together with a lot of other partners. The summary report is available on the WTO website, [wto.org](http://wto.org), and part of this research is trying to trace out production chains and look at the value added at different stages. I want to start by asking, Bob, what changes when we shift the analysis from gross value of trade to value additive trade?

KOOPMAN: One of the simple things that happens, David, is looking at traditional measures of trade balances and trade deficits gets to be potentially quite misleading. So, when you look at things from a global value chain perspective. For instance, you see the U.S.-China trade, balance trade deficit changes quite significantly. A lot of the value that the U.S. imports from China has actually other Asian countries value and even quite a bit of U.S. value.

DOLLAR: One of the things that's happening with global value change is we see a lot of integration between developed economies and developing economies. Breaking down the production process creates new opportunities for developing countries. So, can you talk a little bit about what's the role of developing countries in global value chains?

KOOPMAN: That's become very critical and it's very good for their economic growth. [It] brings about investment, they learn new capabilities, increase their know-how that can spread over into their domestic economies, but the ability to break your supply chain into the most cost-efficient places to produce the things and move them around fairly seamlessly allows developing countries to participate in trade. Whereas before they'd have

to learn how to make an entire car, now they just need to know how to perhaps make brake systems or drive train systems and supply that into a much more complex product that would be would take many, many decades to probably master and produce a globally competitive product. Now they can focus and become very in-depth experts on particular elements of a product, and that often them builds capabilities that they can extend into new and different kinds of products.

DOLLAR: It's interesting that you mentioned autos. Historically, an interesting example is the comparison between Malaysia and Thailand. Malaysia tried to create its own complete auto industry. Thailand integrated with Japanese and American producers, and the Thai approach has been a lot more successful. Eventually Malaysia abandoned the effort of developing a national car.

KOOPMAN: Yeah, I think that's a great example and it shows that you can build capabilities, learn know-how from your partners in the supply chains, and then you can build on those capabilities and become a much bigger player, a much bigger competitor in the global marketplace. And Thailand has done a good job with that.

DOLLAR: But still developing countries worry they're going to get locked in at the low end. I mean, they normally start with the most labor-intensive activities, sometimes a pretty small amount of value added that they're contributing, and they worry they're going to be locked into the low end. So, what would your advice be for developing countries – both good things to do and bad things not to do.

KOOPMAN: Well a good thing to do is to embrace the initial opportunity. Where can you contribute? Where can you generate value added? That's going to generate jobs. It's going to generate other expenditures in your local economy. They're going to have to rent land. They're going to have to build a production facility...those kinds of things, and that spills over into the domestic economy and then there'll be other firms that will end up supplying to the firm.

But anyway, you learn the basic skill and component. So, a key element there is you have learning in mind. You have a development process in mind. And that may not be a government development process, it's key for the firms who are participating in these things to have this notion of I'm going to learn about as much as I can about this opportunity, and I'm going to become expert in what I'm doing, and then figure out where can I take that expertise to some other near nearer capability and build on that. And I think if you approach it strategically, you have a much better chance of success. It's not a guarantee though; that's a key element. You know, many of these countries and firms that are on the low-end worry that the lead firm is going to take their business elsewhere. And you know there is that uncertainty and it's pretty hard to avoid that. But one of the best ways to deal with it is to try to be as good as you can and deliver good value for money.

DOLLAR: Right. So, I think that's a very important point. Some developing countries try to build up their value-added contribution to the production process by closing off parts of their markets essentially using protectionism. And I think the problem with that is your firms really need to have access to the best parts and also the best services. And if you cut yourself off from that then you're really putting your firms at a disadvantage.

KOOPMAN: Supply chains are complex and you're right. I'm glad you brought up services David because that's something I think many firms look at closing off their markets to try to follow sort of an import substitution industrialization approach forget the importance of services. And making sure that you seamlessly integrate into production chains for these multinational firms or big local firms requires understanding how to do that. And having the right capabilities to integrate your computer systems, having the logistics to move these parts and components around...those things are often overlooked.

DOLLAR: I've enjoyed this joint research because I've learned so much from other people's contributions and is one of the things that struck me is that for developed countries they tend to use a lot of imported services. Their production of exports

developed country developing countries less so and I think I know developing countries tend to have more restrictions on investment and trade in services and so they're missing out on an opportunity but developed countries have learned this lesson.

KOOPMAN: Yeah, and you know when you look at global economic development you see services as a rising share of economic activity but being able to bring in the best and the most capable elements of services often means looking around. Just like you want the best parts and components, you want the best service providers you want the best I.T. service, you want the best software you want the best logistics.

I keep emphasizing logistics because when you look at trade costs particularly for manufactured goods you know that transportation and logistics element is still a very big share and that's something that when you have these fragmented supply chains you're moving things around quite a bit. So, you've really got to have highly competitive logistics services and that integrates into things like just-in-time inventory control. I mean there's lots of elements there that are very important—back office business services, billing, payroll—all of those things. If you can bring in the best capabilities you're going to be more efficient and more effective and you can focus on that part of the production process that you're supposed to be good at.

I think many developing countries often their firms try to do much of that in-house and if they do have local suppliers they're not necessarily competing or have leading edge capabilities and service provision.

DOLLAR: That's another really excellent point that we see in the advanced world firms are tending to outsource more and more activities, services, etc. as they try to keep all of that in-house and you can easily generate some serious inefficiency.

KOOPMAN: Yeah, you know it's interesting. Richard Baldwin, a colleague of mine at the Graduate Institute, wrote a great book on the great unbundling. He's got another great book to pitch for glovebox here. But isn't that great on buttonholing one of the things

I always point out to Richard is that unbundling happened domestically before it happened internationally. And so that fragmentation of a production process or a business activity—not just the production process—usually involves: “hey, let's focus on producing this particular part a component. We're not good at payroll we're not good at cleaning the facilities. Let's outsource those things and bring in people who can do it more cost effectively more efficiently.” That's what global value chains are. It's taking that domestic outsourcing and allowing it to go across borders.

DOLLAR: Yeah, one of the fun things in my various jobs has been the ability to visit factories in lots of different countries so I remember visiting one and Taiwan Province some years ago and it was medium size manufacturing firm and the entrepreneur had been working for a big multinational. I won't name it, but a big famous multinational and then eventually he went to his boss and said “you know this whole component here we're doing? I can do that for half the cost.” And he went up and he sent off his set up his own business. And basically, that multinational outsourced that to him as a local entrepreneur. And you know you just get so many interesting stories about how these things upgrade.

KOOPMAN: You bring up this fragmenting of that particular economic activity, one thing that's often overlooked is the fact that while trade statistics suggest multinationals and large firms are responsible for most exports, they have these domestic supply chains that are often small- and medium-sized businesses. And most many of those firms don't even know that they're relying on exports for their economic activity.

DOLLAR: I think that's a very important point. There's kind of a myth for some of these labor-intensive assemblers. Vietnam is a good example. There is something of a myth that they're just doing a very small amount of value added. They export a lot of smartphones for example. But one of the things we show in the report is that the backward linkages are actually very extensive. There are more people employed than in Vietnam in the backward linkage than there are directly in the exporting firms.

KOOPMAN: Exactly. So those supply chains...this notion of global value chains... we are complementing that with a better understanding of domestic value chains.

DOLLAR: So, let's shift gear and talk about the advanced economies of Europe, North America, [and] Japan. One of the things that we show in the research is that there's been a tendency toward job polarization meaning that in most of these advanced economies the share of middle-skill jobs have been declining and the high-end is increasing—and so in some sense that's good news—and then the low and low skilled jobs are actually increasing their share. Now is this related to global value chains?

KOOPMAN: I do think part of it's related to global value chains but there's a complex element here and that's technology and how do we sort out the role of technology from sort of a business decision activity of fragmenting your production and outsourcing a lot of the technological development is for jobs that are codifiable—something that you can write down and potentially program a machine or have a smart machine do for you—and that I think is playing a pretty significant role in many advanced economies in terms of hollowing out many of the middle jobs.

You know you can think about when I was young and in high school there were a lot of people who were taking bookkeeping and that was a good job. You know you graduate from high school and you'd go become a bookkeeper for a firm small firm or a big firm. Well now there aren't very many bookkeepers right. Because we have software that does that that that activity was very qualifiable.

The things that seem to be being rewarded in the in the job market are those things that are difficult to codify—so there's a lot of sort of tacit knowledge around that it's very difficult to necessarily write it down—and those are for both the complex and the low end. So, believe it or not it's pretty hard to provide janitorial services and walk around and clean an office. It's not something that's necessarily easily to write a program on. You know you take all the papers off the desk do you do you know do you just dust around the papers.

So, it's a very complex thing that firms have made very good use of this notion of mixing the lower cost labor with a certain amount of technology and producing things for at least cost so there has been some of this offshoring of economic activity. It's been good for the developing countries it's lowered prices in the in the developed countries. So, it's helped expand demand. It's a complex thing Dave and I don't have a very simple answer for it right now.

DOLLAR: I think that's actually a smart answer. There's a certain amount of debate here in the United States about to what extent this is the result of technological change. To what extent is it the result of trade lot of that strikes me as a very arbitrary or almost semantic distinction. So, imagine a firm that's breaking up its production process because now there are new opportunities to move the labor-intensive parts to say Vietnam or Bangladesh and that could easily show up in a careful analysis as technological change. But it was induced by the opportunities for trade. So, I think that whole distinction is somewhat arbitrary.

KOOPMAN: It is, although policy makers do want insights on it and so we do work hard to try to distinguish that. But we find that the...when you try to provide just a simple answer that trade destroys jobs, you know, you find that it's much more complicated than that.

You know there was this very great piece by Auto, Dorn, and Hanson that looked at the rise of China and the impact on certain localities in the United States. And it's a very good study in an isolated something that was very important: the fact that import competing regions could be adversely affected. But it was really a sort of a partial equilibrium study. It wasn't a general equilibrium study, it did look at the effect of those that import competition on particular regions, but it didn't have to ask the question—the general equilibrium question: what happened as a result of those imports to overall jobs around the country? And a lot of the research done since then suggests that while affirms Auto, Dorn,

and Hansen's findings, it makes it clear that those findings are limited in their applicability and that when you look at the general equilibrium question jobs generated as a result of cheaper and higher quality goods coming in that there is net job creation.

DOLLAR: Right, and the job creation—I think in the U.S.-China trade a lot of that job creation on the US side has been for college educated workers and service sectors, and then also in some manufacturing sectors that are different from the ones that are competing directly.

KOOPMAN: The higher end ones or things that are heavy and local and aren't easy to ship.

DOLLAR: Right. But clearly this is a disruptive process, so whatever the source of this job churning, are there things countries can do to mitigate this? Are there good examples of developed countries that have policies to help deal with regions and workers who are disadvantaged?

KOOPMAN: We have seen that some countries have managed this better than others. And I would say, it's not clear to me that the US has managed this particularly well. The countries that have done well have tried not to protect jobs – what they've tried to do is protect workers. And that's quite a distinction there. So, you're not trying to keep the exact same job, what you're trying to do is make sure that a worker has the capability to move to whatever jobs might be in demand and give them an opportunity to help with the transition and the disruption. We do know that if you're a worker with a certain set of skills, if you lose your job it can be very costly. Whether you lose your job because of trade, or you lose it because of technology, or you lose it because of changes in consumer demand –people don't want those products anymore or that service anymore—transitioning to some new productive activity can take some time and be costly. It's really inefficient to protect him tried to preserve specific kinds of jobs, and that will reduce your competitiveness it will raise your prices, and it's not likely to be successful in maintaining the job. So, the best

thing to do is to try to develop a system, a safety net, that helps with transition no matter what the cause of the economic disruption is.

For those countries that we've seen pretty good examples, we often talk about the Nordic countries where they've done a much better job in creating a safety net that facilitates adjustment. But there's no one size fits all and what works for the Nordic countries may not work for other countries. So, you have to figure out what's socially acceptable for your country, but there are certain principles you want to look at and that's facilitate adjustment no matter what the shock in the U.S. there is an adjustment program for trade free trade adjustment assistance. And you know generally the review of it is that it hasn't been as successful as people might think. Well, I think it's a mistake to have trade adjustment assistance, you ought to have you know economic adjustment assistance no matter what the shock is that you get help and you get some assistance in transitioning to some other productive activity.

But it is not easy to design those programs. And that's where economists...I think economists and sociologists need to come together and think a bit better and come up with better solutions here.

DOLLAR: Another thing I've learned from this research into global value change is change is the growing role of services. If you look at the gross value of trade it's mostly merchandise, about 80 percent of world trade and that's been very stable for a long time I found that a little bit surprising but when you shift of value added more and more of the value added of trade is coming from services so can you comment on that. What's going on there.

KOOPMAN: Well you see that services are very key element in helping to produce competitive products innovative products and the fact is that with automation and with global value chains parts and components, the physical elements, can get pretty cheap. You know you can you can produce things now much more inexpensively than you could

30 or 40 years ago because of technological improvement process improvement.

Significant gains in productivity through technological change. What becomes increasingly more important is your ability to get a product in front of the consumer; to design good, effective products; to do the R&D that's going to produce something that people want to buy; and those services tend to be very valuable because they help they help deliver the product in a way that consumers then want to buy it. So, it's not just about producing a manufacturing a good product a high quality product a well-made product. It's about designing one that meets a need that people want to buy. And does it in a way that people appreciate the effectiveness of the product.

DOLLAR: Last question, Bob: Does this rise of global value chains—some of the issues we've talked some of the issues we haven't gotten into yet. You know what's the implication for the WTO. Are there needed changes in WTO and new issues raised by global value chains.

KOOPMAN: I think what global value chains have done has really helped emerging economies become much larger players in global trade they no longer have to come up with a complex industry to produce something from you know top to bottom and export it and into to the global marketplace and try to find buyers. They've been able to use this fragmentation of production to sell their capabilities to produce parts and components become big players often upskilling and becoming better at producing more complex products. What that has done is kind of disrupted the power balance, or the perceived power balance, of the of many developed countries at the WTO. So when things like the Uruguay round were signed you know people looked at global trade and said OK we've had this long distribution of economic activity where the developed world dominates economic growth and dominates trade, and all of a sudden, partly due to global value chains and partly due to good economic development policies developing countries are playing a much bigger role in trade and have much faster economic growth.

That makes many of the rules that were negotiated at the WTO perhaps not as fit for purpose now. Many of the processes at the WTO may not be as fit for process fit for purpose now. There is a big discussion around WTO reform G 20 members. That one has 20 leaders in Buenos Aires made the declaration that they wanted a report from trade ministers about reform of the WTO this coming June at the next G20 leaders' summit, and I think that's very important that members make this happen and think about how to design a WTO that addresses modern needs.

One of the areas, David, that hasn't been addressed that much is e-commerce or the digital economy, and it's been very difficult to get 164 members to agree in this very dynamic setting as to what kind of rules might be helpful. But we have a group of members who are interested in trying to negotiate rules that are more up-to-date and fit for purpose and that kind of like-minded countries taking things forward, trying to develop rules, applying them on an MFN basis, could be a path for future WTO reform and future WTO advancement.

But there's also the day to day work of the committees. Countries are supposed to notify about policies that might have impacts on other countries. Compliance with those notification requests have not been as high as other members would like, and so there's big negotiating things that could be done and then there's the practical day-to-day activities that could improve the performance of the WTO and perhaps get more support among members.

DOLLAR: We've been talking to Bob Koopman chief economist of the World Trade Organization about global value chains including some new research highlighted in a report that's available at [wto.org](http://wto.org).

Thank you, Bob.

KOOPMAN: Thank you, David.

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DOLLAR: Thank you all for listening. We'll be releasing new episodes of Dollars and Sense every other week. So, if you haven't already, make sure to subscribe on Apple podcasts or wherever else you get your podcasts and stay tuned.

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And until next time I'm David Dollar, and this has been Dollar and Sense.