



**ECON-19: Inside the Corona Crash**  
*Season 1: Episode 4*  
*Trade and Transport*

James Whitmore: We're stuck, not just in our homes, but in our cities, our states and our country. We can't fly anywhere. And it's not just people that have stopped moving, but the things we buy. Goods and services have been stalled too. I'm James Whitmore and this is ECON-19, a podcast from the University of Melbourne that takes you inside the economics of the coronavirus pandemic. This episode, we're talking about trade. Like most countries in a globalized world, Australia was dependent on trade for our economic prosperity, but the movement of goods and people also comes with risks, like spreading a virus. We spoke to an economic historian who has looked at how trade and transport networks have spread disease in the past.

John Tang: My name is John Tang and I am a senior lecture in the department of economics at the University of Melbourne.

James Whitmore: So, John you're an economic historian. Can you tell us a bit about what that means?

John Tang: I guess for me, it's kind of like wearing two hats. So like one being in economics and the other in history. So being an economist means that I use data and statistical techniques to identify relationships. And as a historian, I have to understand the context in which the problems I'm looking at are taking place. And that gives me some nuance to the interpretation of the results. So it's a bit different from strict economists who develop and apply models. And it's also a bit different from strict historians who have many different approaches or maybe a bit wary of doing quantitative analysis.

James Whitmore: And one of the advantages that come from looking at economic history, particularly when we consider modern economics.

John Tang: And so there's that famous quote that if you don't remember the past, then you're doomed to repeat it. And I firmly believe that there are a lot of lessons from history to help us better understand both our present and our

future. Both disciplines have a lot to contribute to understanding the world and can learn from each other. Specific advantages from understanding history in an economics perspective is that you have a lot of time to think about what went on and what are some of the implications of past events.

James Whitmore: So can you tell us a bit about your work on transport and the spread of disease in Japan?

John Tang: I wrote a paper a couple of years ago that was looking at the introduction of railroads in Japan, in the late 19th century. And what I was interested in was seeing whether or not there was a relationship between this new transport technology and the spread of infectious diseases. I thought it would be interesting because it's not something that has really been studied, at least in a historical perspective. And Japan had a very interesting setting to examine this issue because railroads were a very new technology at the time. So this was over 150 years ago. It's basically the equivalent of having Star Trek transporter technology, where you very quickly can go from one place to another and it was unprecedented, but there were some patterns in the health statistics that were kind of odd, meaning that you saw this increase in mortality that was occurring around the same time. I thought maybe the two had a relationship to each other. Yeah. I put together some data and I was trying to figure out exactly the mechanism by which railroads could be spreading disease.

And so it was trying to identify a causal relationship between one and the other. So you can see patterns of mortality before an area gets a railroad and then see what the patterns are after an area gets a railroad. And then you would take this region, the pre and post periods, and compare it to other regions at the same time periods. And the second region doesn't have railroads for the entire time. And if you see that there is this discrete increase in the first region after getting railroads, but nothing's happening contemporaneously in the second region, then you have a fairly strong case that what you've identified as being the change between the two periods is causing an increase in mortality.

James Whitmore: All right. So the reason we're talking about this and the reason that it's so interesting is, of course, because we're in the middle of a pandemic. So when we consider our situation today with COVID, what kind of parallels can we draw?

John Tang: I would say that it's a bit difficult to draw direct parallels between COVID and some of these historic pandemics, because we don't have great data for really early pandemics, like the bubonic plague. We do know how it kind of moved around, at least through Europe. In terms of SARS, or let's say the Spanish flu, which is something that you see now frequently referenced to in the news. You do see that areas that practice social distancing or we're careful about keeping disease transmission low or ones that had better outcomes in the short and long run. But other things to think about would be whether or not this has any effect on the economy on later health outcomes. And we don't really know yet from COVID because we haven't had the time to study it.

- James Whitmore: Yeah. But it's pretty clear with all these pandemics that transport at least plays some sort of role, whether it's shipping and trade routes during the bubonic plague or plane traffic today. And I think you've mentioned road transport in Africa and its role in the spread of HIV. So it's fair to say that transport at least plays part, is part of the story when it comes to these diseases, isn't it?
- John Tang: Definitely. So what is similar at least between our present pandemic and some of these earlier ones is that we actually don't have a cure. The most that we can do is buy ourselves some time to have researchers and governments develop treatment for COVID. That's what limiting transport can do for us. It just buys us some time to be able to figure out what to do. And I just read something this morning, that was a little shocking. There's a Yale epidemiologist who anticipates that maybe 40% of the world's population will be infected. And that's speaking of 2020 now with all of our modern medical advances. So it's not saying that the same numbers of people will die, like what we saw in the plague or the Spanish flu, but it's still pretty shocking that so many people potentially could suffer ill health from this.
- James Whitmore: It's a lot of people. All right. So I want to take a step back and talk a bit more about this idea of the link between trade and transport and disease and go right back to basics and ask you what is globalization?
- John Tang: Good question. So globalization, I think a lot of people think of it as just people moving around, increases in trade, the spread of different types of ideas, maybe some homogenizing of culture. And I agree that it would be all of these things. It is basically how you integrate different parts of the world together, except now on a global scale.
- James Whitmore: And we talk about the rise of globalization. So it's kind of a new thing. When did it begin and why is this an age of globalization that we're in?
- John Tang: Historians would probably say that we've always had globalization. So if you look back hundreds of years ago, you had the silk road, which connected the far East with Europe, but whether or not that's actually globalization, for all of humanity, probably not as clear. In the modern era, we think of globalization as appearing at the end of the 19th century, when you had these European empires that basically knit together different economies around the world. That collapsed with the world wars and then you saw it re-emerge in the last few decades of the 20th century. And we're currently still in this second age of globalization.
- James Whitmore: So even though there are a lot of critics of globalization, it's usually talked about as a good thing. Why is that?
- John Tang: I agree that it is a good thing in general. I would say that it definitely does create winners and losers, but if you were to take the average, most people have seen tangible improvements in their welfare from globalization. It's let us buy things much more cheaply. It's let us move around the world more

easily. Just being able to share information, share goods, all of this is something that improves our quality of life.

James Whitmore: Is it fair to say though that, I mean, despite all these benefits, pandemics, like the one we're seeing today, are a cost of globalization?

John Tang: Yes. I would say that it is maybe an unexpected or unintended consequence, but if you look at the historical record, you do actually see this as being a pretty consistent pattern where if you move people around, sure, they're going to bring goods and bring ideas, but possibly also diseases. But the net impact I think is still positive. So this shouldn't be a reason to stop the exchange between societies and people. It should be something that we're aware of to try to mitigate the negative consequences. But as a whole, it would have severe impacts on our quality of life if we were to decide to stop this movement or interdependency between economies.

James Whitmore: So can you just talk us through some of the damage that COVID-19 has done to trade and the response to COVID-19?

John Tang: Sure. So I think the World Trade Organization had forecast maybe in June that global trade would decline between 13 and 32% this year. And so that's enormous. Whether this is just a temporary dip and that we'll be able to resume our levels of trade that we had in past years isn't really clear yet, but having this decline in trade, maybe it's something countries can survive in the short run, especially if you've built up some supplies. But over the long run, it's going to be quite damaging because we have globalized supply chains and ironically places like China, which were the first hit by the coronavirus, it was also a major supplier of medical supplies. So cutting ourselves off from other parts of the world, it might make sense in the immediate term, but it also means that we're not prepared for some of the consequences that come with it.

It's not going to be easy to readjust world economies to a more self-sufficient mode simply because that's probably not what we're good at. Very few economies can be all things for all people to have all types of industries, to manufacture all types of things. And it's because of trade of globalization that you've eliminated famines in most countries because different parts of the world are able to weather different shocks. And so then if you have this collective orientation, then you can help each other. And you can supply things that you're better at making and exchange them for things that you're not.

James Whitmore: So it sounds like in the long term, we're going to have to figure out how to continue trade, continue movement, potentially while the virus is still in circulation. What do you think governments can do to build trade back up while the virus is still around?

John Tang: This won't be an easy policy mix. I do think that in the very short run, what governments are doing in terms of closing borders, that is blunt and it is effective. There's no point in risking reinfection before we understand how this disease is transmitted, whether or not there's treatment available. But

given that our long-term prosperity depends on this exchange through globalization and in Australia being a small country that is somewhat reliant on the manufacturing capacities of other economies, it's important for us to be able to plan for steps to reintegrate. While the pandemic is going on, this is giving policymakers some time to assess what global supply chains are viable.

How reliant are we on certain countries for certain goods? Is it possible for us to diversify our economy in a way so that we still engage in trade, but can also mitigate some of the volatility that happens when you have a disruption. But to encourage trade in the long run just requires us to coordinate much better with other countries, not only in economic policies, but also in health. And so just having open communication about outbreaks, being able to share information about medical technologies and breakthroughs, all of this, even if it doesn't benefit us immediately, we may not profit from this as an individual firm or country, means I'm in the long run with everyone healthy and everyone cooperating that we can all benefit from this exchange.

James Whitmore: We live in an increasingly interlinked world. And as we've heard, while globalization has its benefits, it also comes with risks. But with much movement paused as we deal with the pandemic, perhaps we have an opportunity to take a look at what matters most to us. Thanks to our guest, John Tang. Subscribe to ECON-19 for new episodes. For more insights on the economics of the coronavirus, head to our website, [fbe.unimel.edu.au/econ19](http://fbe.unimel.edu.au/econ19). ECON-19 is recorded on Wurundjeri land. The podcast is produced by Seth Robinson, Sophie Thomas, and me, James Whitmore. The theme music comes from Premium Beat.