Transcript of IMF podcast:

[Shipping Costs and Inflation]

Yan Carriere-Swallow:

I don't think there are real alternatives to ocean freight. And so given the decentralized nature of global trade networks, I think we're stuck with sending things by ship across the oceans.

Bruce Edwards:

So in early 2020, when we all rushed to stock up on supplies to hold us through the lockdowns, little did we know that the whole system that keeps shelves stocked across the globe was also being significantly disrupted by the pandemic. A problem that- like the pandemic, is still very much with us and causing other problems... Like inflation.

Yan Carriere-Swallow:

What might appear like a localized disruption in shipping networks actually has really global implications on prices.

Yan Carriere-Swallow:

I'm Yan Carriere-Swallow. I am a senior economist in the IMF's Asia and Pacific Department. I've been at the Fund for about 10 years, focusing on macroeconomic issues, primarily in emerging and developing economies.

Bruce Edwards:

So what prompted you to dive into this world of shipping containers and ocean freight?

Yan Carriere-Swallow:

Well, actually early in the pandemic, I was part of a team that was working on a lending program in Guinea, in West Africa. And we were on a virtual mission which, it was my first virtual mission at the time, turned out not to be the last, with authorities in Conakry in Guinea. And one of my responsibilities on that team was to do the projections and do the monitoring of their balance of payments. And so, that's often a bit of a dry exercise where, particularly virtually, we're on a laggy connection and speaking to the counterparts over at the central bank, going through line by line and the balance of payments to see how things are developing and what their views on, about where they're going.

Yan Carriere-Swallow:

And in that context, we were on this call, and we came to a line that I had never paid much attention to in the services account, for how much the country was spending on freight. And this was for 2020, the number was some large share of GDP. It had jumped by two orders of magnitude.

Yan Carriere-Swallow:

And I just assumed that there had been some kind of a mistake. So, I came back to them in a following call and said, well, this number here, are you sure? With all respect, is this from the customs office, is this a hard number? Can it really have increased as much as you say it has? And they came back and said, no, no, we actually had the same reaction. So from the central bank, they'd gone down and chatted to the people at the docks. And they were the ones who told me, the price of importing a container full of goods has gone up by a factor of three or four.

Yan Carriere-Swallow:

And from the central bank, it was not only a concern because it had driven the current account into deficit, so it had hit the balance of payments in a really important way, but also they were worried about it hitting inflation, and they were seeing the prices of imported goods going up fast. And so it became also an issue for monetary policy. And so all of a sudden, this line that I just never really paid much attention to was all of a sudden, top of mind for our whole discussion with the Guinean authorities. So, that was when I turned onto this topic.

Bruce Edwards:

How interesting. So how much would a country expect to spend on that type of thing, like shipping, ocean freight, at least, up until recently?

Yan Carriere-Swallow:

Yeah. So when we looked at this line that I've been talking about in the Guinea context, when we, colleagues and I looked at it for a whole bunch of countries, we actually were surprised by how much countries spend. So, on average, a country will spend between seven and 8% of the value of all the goods they're importing will be going towards the freight costs of getting them to the dock.

Yan Carriere-Swallow:

Okay. So, that's quite a large number, and that number varies an awful lot across countries. So you've got some countries where it might be less than that, they might spend two or 3%, but then you've got other countries, and West Africa is an example of countries that spend a lot where they'll spend upwards of 10, 15, even 20% of all the goods they're importing is just going to the freight cost of getting them there.

Bruce Edwards:

That's significant. And so what's driving these dramatic price increases? Are they a product of the rising inflation that we've seen recently, or are they contributing to the inflation problem that we're having right now?

Yan Carriere-Swallow:

Well, the work that we've done suggests that it probably is.

Bruce Edwards:

That it is part of the problem?

Yan Carriere-Swallow:

That it's part of the problem. So what we find is that we look at the experience from over a hundred countries over the last 30 years before the pandemic. And we find that when shipping costs go up, you get inflationary impacts all around the world. And those impacts, if you were to compare the contribution to inflation that you get from these shipping cost increases, it's actually comparable to other global variables like oil prices and food prices, which are variables that we traditionally worry a lot more about, and we know a lot more about. We actually find the shipping costs are on that level in terms of contributions to inflation.

Yan Carriere-Swallow:

If we think about the pandemic period in particular, global shipping costs have gone up almost an unprecedented amount. So, they've gone up by a multiple of seven on average since March 2020. So, that's really a very large jump. So, our estimates, while they're based on pre-pandemic experience, would presuppose that this spike we've seen in the pandemic could be contributing as much as one point or a point and a half to inflation rates around the world. So maybe not the main driver, but certainly an important one.

Bruce Edwards:

And so when shipping rates go up, the prices on consumer goods inevitably follow suit, but how long might it take before consumers actually start feeling the pinch? What's the lag time?

Yan Carriere-Swallow:

Yeah, that's a good question. So we traced this through a little bit, and we found that the prices of the imported goods that are coming into the country go up at the dock right away, within a month or two, you see it in the data. Shipping costs go up, those prices they're going to go up in local currency almost immediately. It's also true that producers in the country, so companies who are buying imported goods as inputs in their production, they're going to see increases in their costs almost immediately as well. So that pass through happens very quickly, but it takes much more time for that to pass through to consumers. And what we estimate is that the inflationary impacts build up gradually over a period of about a year and peak 12 months after the shipping costs increased.

Bruce Edwards:

Wow. That's a significant amount of time. And are some countries more affected by this than others in terms of consumer prices?

Yan Carriere-Swallow:

Absolutely. So just as I mentioned earlier that some countries spend more in normal times on shipping costs than others do, those countries are also more affected when those shipping costs rise. So we find evidence that, for instance, poor, low-income countries are more affected, they see more inflationary impacts from rising shipping costs. That's partly because they spend more on shipping to begin with. We also find that among island countries they're particularly affected. So island countries in the Pacific, in the Caribbean, who really depend on imported goods for a lot of what they consume are very susceptible to the inflationary impacts of an increase in shipping costs.

Bruce Edwards:

And do you think, have we seen the peak of this in terms of how much prices have risen in the shipping industry and how much prices have risen in terms of consumer goods?

Yan Carriere-Swallow:

So, it's always hard to make... economists have trouble making statements about the future. But I think shipping costs have stayed very high for quite an extended period now, container prices are still about seven times higher than they were before the pandemic, even many months after the initial climb we saw last year. It's also true that we're seeing continued strain on global supply chains from the war in Ukraine, also from the zero COVID policy in China, which is leading to some congestion in Chinese ports. So I think, there's certainly factors that would lead you to think that shipping costs may stay high for a while. In terms of the inflationary impacts, we are concerned and we're advising country authorities that they should expect inflation from last year's rise in shipping costs to stay with them at least through the end of this year. But, of course, we don't know what the future holds and whether they'll be future rises and so on, that might affect us next year as well.

Bruce Edwards:

So what does this all mean, in terms of exposing weaknesses in the global supply chain system? Do you think that this might prompt a push to find alternatives to ocean freight?

Yan Carriere-Swallow:

I don't think there are real alternatives to ocean freight, certainly in the short run. During the pandemic when the ocean shipping networks were really disrupted by pandemic shutdowns and so on, we did see some countries who could afford it shift towards air freight for some more essential, smaller, more compact goods that could be shipped by air. But the cost of doing that is just so much higher that it's not appropriate for wide class of goods, think of refrigerators, it's just not feasible to ship those things by air. And so given the decentralized nature of global trade networks and how production is spread over many countries and trade is so pervasive, I think technology being what it is today, I think we're stuck with sending things by ship across the oceans. And so I don't see there being a lot we can do there.

Bruce Edwards:

And the size of these ships are incredible. Some of them are a kilometer, or half a mile long with thousands of these containers. And you can see how disruptive one little issue can be, like the one in Suez Canal a few months ago, there was one ship that was stuck there and it essentially put a halt to all shipping across the world, was very disruptive.

Yan Carriere-Swallow:

That's absolutely right. I'm glad you brought that up. That was one of the events that really sparked our interest, just how disruptive that was. How one captain's error can lead to a major disruption that has ripple effects across the world. And we actually... that's one of the events that we study in the paper. We look at three closures of the Suez Canal that took place over the last 30 years. And what we show is that after these closures of the canal, you see inflationary impacts spread around the world over the following 12 months. And so any kind of disruption... what might appear like a localized disruption in shipping networks, actually has really global implications on prices.

Bruce Edwards:

And so what happens now? Given that there are few, or basically no alternatives to shipping these containers, what can governments do, do you think to help mitigate the effects of these rising prices?

Yan Carriere-Swallow:

Yeah. One of the things that we find is that countries that have more credible monetary policy frameworks, where inflation expectations are better anchored, they see less inflation from these types of shocks. They see a different type of inflation as well. So they'll get the same amount of inflation at the dock, that's to be expected, there's really not much that countries can do about that. But what they do see less of is that inflation getting passed through to consumers. And so in that sense, I think they're, in terms of the monetary policy response, they're better equipped to not have to overreact to an increase in freight costs.

Bruce Edwards:

So, is this what you're advising countries to do?

Yan Carriere-Swallow:

Well, of course that's, I think something that we always tell governments and that we find in this research, is that having monetary policy that's credibly delivering price stability leaves the country in good stead to handle a whole range of external shocks, including rising oil prices, rising food prices and rising shipping costs.

Bruce Edwards:

Yan Carriere-Swallow, a senior economist in the Asia and Pacific department. Thanks so much.

Yan Carriere-Swallow:

Thank you, Bruce.

Bruce Edwards:

Yan Carriere-Swallow and co-authors Pragyan Deb, Davide Furceri, Daniel Jimenez and Jonathan Ostry have a working paper on Shipping Costs and Inflation, check it out at imf.org.

Bruce Edwards:

And look for other IMF podcasts on Apple Podcasts or wherever you listen. You can also follow us on Twitter @IMF_podcast. I'm Bruce Edwards. Thanks for listening.