THE BROOKINGS INSTITUTION

DOLLAR & SENSE PODCAST

How might COVID-19 affect the global economy?

Monday, March 9, 2020

WARWICK J. MCKIBBIN
Nonresident Senior Fellow, Economic Studies
Co-Director, Climate and Energy Economics Project
The Brookings Institution

DAVID DOLLAR
Senior Fellow in Foreign Policy and Global Economy and Development Programs
John L. Thornton China Center
The Brookings Institution

****

DOLLAR: Hi, I'm David Dollar, host of the Brookings trade podcast, "Dollar & Sense." Today our topic is the economic impact of the coronavirus, in China and globally. My guest is Warwick McKibbin, who holds a chair in public policy at the Australian National University and is also a nonresident fellow here at the Brookings Institution.

So welcome to the show, Warwick.

MCKIBBIN: Happy to be here, David.

DOLLAR: The coronavirus that's spreading around the world is obviously going to have a big economic impact in China and apparently in the whole world. So why don't we start by just talking in general about how the virus is going to affect the economy. You have a new study tracing out different scenarios. How does the virus affect the economy?

MCKIBBIN: The first thing we have to do is work out what assumptions you want to make about the virus, because at the moment we don't have […] information. So what we did is look back at history at other epidemics and we came up with seven different scenarios of the way the epidemic might evolve. We then take those different assumptions and feed them into an economic model. We work out what we think will happen to the labor supply. So people will die, people will get sick, it will save […] and so we did an estimate of labor supply changes in each country. We work and how much we think the costs of doing business in different sectors in different countries will change. An increase in doing costs is like a reduction in productivity. We also work out how much we think people will change their consumption preferences – not their aggregate spending, but their preferences because the model itself will tell us how consumption will adjust to changing preferences. And we look at what we think financial markets will do: How people change their perceptions of risk. And we try and work out how we think in different sectors people will change their demand for different types of shares of different companies – both because the companies themselves will have profit hits coming from the virus, but also because people become more conservative than not, and will actually decide not to half shares […] and cause the share market to fall.

So we work out a whole range of these different types of shocks to different countries and different sectors, and we feed it into that economic model that tells us what happens to consumption investment, what happens to trade, what happens to exports and imports, what happens to stock markets, bond markets, return to capital and equity markets. And we analyze what we think is likely to follow on from each of those various assumptions.

DOLLAR: So it's kind of natural to compare this new virus to the SARS virus – a strange virus that comes out of China. You did pioneering work back in the day estimating the costs of the SARS epidemic and I think your figure was around $40 billion. That's about 20 years ago. You're looking at much larger numbers now and thinking about the effect of the coronavirus on economies. So how come the effect is so much bigger?

MCKIBBIN: Well, there's several reasons for that. Already there are more people that died from coronavirus than died from SARS. For SARS, it was under 800 people who died. It was contained very quickly, even though it did spread to a number of countries: Hong Kong, Canada, and others.

What the biggest difference at the moment is that China is now a much, much bigger share of the global economy. SARS broke out when China was just beginning their reforms. Today, China is a much, much larger share of the global economy.

Secondly, a lot of production processes in many countries feed out of production from China. So China is an integral part of global production chains. And what we've seen happen in China is a complete shutdown of cities and production facilities. So both the demand effect of China on the world economy, and the effect of supply shocks in China on the world economy, are already orders of magnitude bigger than what we saw in SARS.

DOLLAR: In the case of SARS, there was a very sharp drop in China's GDP – or slowdown, actually – during one quarter, and then the Chinese economy bounced back pretty quickly. Seems that there are new features of the Chinese economy that to me make it less likely that you're going to get that kind of quick bounce back.

One change: You mentioned China's growing role in the world. Also, China is a more consumption-oriented economy. The service sectors are much bigger. I wonder, as the economy bounces back, it's one thing for people who are planning to buy a car to go out and buy the car six months later. That is a kind of bounce back. But people who didn't go to the movies, didn't take their vacations, have stopped going out to restaurant meals. I wonder if we get the same kind of bounce back in the service sectors?

MCKIBBIN: Well, that's exactly right. I mean, that's what we try to capture in our model, changing people's … not only changes in their preferences, but also the model itself tells us how much they'll save and how they'll spread their savings over consumption in the future. There also will be destruction of wealth. Closing down factories from a period of time, people not working or not receiving income, that has a wealth effect as well as an income effect. So, again, we try to control for that by having […], and even digging into the service sectors to see which sectors are likely to be the most affected.

DOLLAR: The economic costs are likely to be concentrated in China to start with. We're already getting some February data which are pretty striking. The purchasing manners for both industry and services in China were at historic lows. It looks like China's imports and exports have declined pretty significantly during January and February. But now the effects are likely to be spreading to the rest of the world.

So if you have seven different scenarios, maybe you could characterize for us, you know, what's a more optimistic scenario, what's a more pessimistic scenario, and what really leads to the differences. So why don't we start with what would be a relatively optimistic scenario for the world economy?

MCKIBBIN: Well, just to clarify the seven scenarios. The first three scenarios are assumptions about what happens in China and assuming that the coronavirus actually doesn't migrate from China. It's basically trying to understand the impact of a slowdown in China on the world economy. And this is a scenario which is a sharp change in the first year, but it goes away. The next three scenarios look at what happens if the virus itself spreads to other countries. So now we're getting both a demand shock from China as well as a spread of the disease across economies. And the final scenario is what happens if this is actually a new world where every year now we are concerned that the virus will reemerge. So we have one permanent, continuous reemergence of epidemics.

So each one of those its optimistic side and its pessimistic side. The way we define optimism and pessimism is basically the two key inputs we take for epidemiology. One: what's the attack rate, in either China or other countries. So the attack rate is how many people get sick. And the other key assumption is: of the people who get sick, what proportion of those people die? And there the key two assumptions vary across the scenarios.

So to give an example, the first scenario, which was the very beginning of the outbreak, was an attack rate of 1 percent – which is still very high compared to what we've seen in China – but a case-fatality rate – or people dying who have been affected – of 2 percent, which is below what people were thinking was closer to 3 percent. So even that mild scenario that we talked about in the paper itself had more people dying in China than we've currently observed.

We then scale that attack rate up. Instead of being 1 percent, we make it 10 percent or 30 percent, which is consistent with the previous major pandemics of the 20th century. And we scale up the case-fatality rate, or the proportion of people who are dying, from 2 percent to 2.5 percent to 3 percent. And then, when we're looking at spillovers to other countries of the disease itself, we also change the attack rate in other countries and the case-fatality rate.

So it's a question of trying to look at what's happened historically, applying that to the current outbreak, and then looking at how the economies will adjust under those various scenarios.

The worst scenario, which is Scenario 6, is really replicating the Spanish flu of 1918, 1919, which is a very devastating hit to the global economy; hundreds of millions of people died. That is highly unlikely, but it was worth looking at a range of scenarios just to give policymakers an idea of just what does it cost if this is not dealt with urgently.

DOLLAR: Right. It seems to me one of the points of your paper is that some of these potential costs are so enormous that it's really worth putting resources into preventing these kind of pandemics, the spread, investing more in public health. Just in general, what should governments be doing now to try to steer us toward the better outcomes and away from the more dire scenarios?

MCKIBBIN: There's two dimensions that we're worried about in terms of the lack of government spending in areas of prevention. One is how much the government spend if a virus breaks out, which is short-term how much should you be willing to let it affect your economy to prevent spread of the disease. The second is the longer-term issues of how do you prevent viruses from emerging in the first place.

If you focus on that second point, as you've noted at the beginning, this outbreak came from China. In fact, almost all of the […] diseases – which is a cross between animals and humans – have been in poor countries, developing countries. And so what matters is public health not just in the advanced economies to deal with the disease response once they arrive, but actually investing in public health in the poorest countries, because that's where the disease are likely to both emerge and propagate very quickly because we don't have enough capacity to respond to those diseases.

So the idea – this very big push at the moment for nationalism and that you should be ignoring what's happening in the world because what matters is what happens at home – that completely ignores the interdependence of the world, not just in terms of global trade and capital, but the interdependence of the natural world across countries. You cannot be an island in a world where nature is global. So that's one of the key problems: we have to invest in raising public health standards globally. It’s in our national interest.

DOLLAR: So Australia is a good example of a medium-sized economy that's got really deep ties with China. So how is the coronavirus affecting Australia? What's the government doing, and what do you think the government should be doing?

MCKIBBIN: So the first big impact was when the virus broke out. Australia's got extensive trading with China. We got hit very quickly, both directly because tourism dried up, and also we have a lot of foreign students, mainly from China, who come into the universities here. So there's revenue sources dried up very quickly. Then when China started to slow, the demand for iron ore and other major exports –particularly wine, food, and other exports to China – dried up. So we ended up with quite a severe demand shock hitting the Australian economy.

Australia has a very, very good public health system. We have universal health coverage. We have very good systems for managing these types of events. After the SARS pandemic, there was a lot of investment in putting in place the capacity to respond very quickly to these sorts of events. So, I think of all the countries in the world, Australia is best placed to manage the pandemic internally. And I think the government's doing a very good job, both the state and federal.

Secondly, there is this demand shock which needs to be dealt with. So the central bank has cut interest rates this week to try and help stave off demand and negative effects. And they have the fiscal authority. The Australian Treasury is putting in place policies to try and help industries survive through the period when there may be severe disruption.

Now, again, just changing demand policy doesn't solve the shock because this is both a supply shock than demand shock. And it's a shock of the dislocation of production capacity. So, really what matters is that people whose incomes are cut or firms who are unable to sell products, they need to be helped through a period of temporary disruption. The government has put in place plans to deal with that very effectively as far as I can understand from the outside.

DOLLAR: So you mentioned your central bank cutting interest rates. Obviously, the Fed earlier surprised us with a 50-basis point cut. The first day the stock market reaction seemed to be to go down pretty significantly – perhaps taking that as a signal that everything was worse than people had thought. Then the following day, the market went up. Then the following day, the market went down. So, it's probably natural we get this kind of volatility, but have you been surprised by how markets have reacted to the Fed's cut?

MCKIBBIN: Well, so, I've been surprised that the Fed cut, actually. There wasn't really a clear indication that there was a very large negative demand shock to the U.S. economy in contrast to the nature of the shock hitting Australia we were seeing in real data. And as you mention, the Chinese production data was a great forecaster of the decline of our exports. And so I was surprised the Fed cut because cutting rates at the time sent a message of complete uncertainty to the market.

The second thing to point out – and I think this is under-appreciated – is most equity markets and bond and asset markets around the world, I think, are very highly over-valuated, partly because of the amount of debt in the system, and partly because of very low interest rates in the global economy. So I think there are a number of asset bubbles in the system and what was needed to bring those bubbles back down was a major shock. So I think this outbreak of the coronavirus was both a medical shock – a health policy shock – but it's also a shock that could lead to a re-valuation of the basis of assets in global markets.

And so that's why I think there's so much uncertainty and so much volatility. People are unsure of what the true evaluation of these assets are even without the coronavirus, and then we have the coronavirus shock. And in the end, […] isn't really the solution here. The solution is really dealing with the dislocations caused from the supply side. I thought the Fed policy probably added uncertainty to the marketplace that wasn't really necessary at the time, but we'll wait and see. It may have been a strike of brilliance. We'll see what happens in a few weeks.

DOLLAR: The timing of the virus was interesting in a sense for those of us who follow China, because the U.S. and China had just signed their phase-one trade deal. Vice Premier Liu He came to Washington at a signing ceremony with President Trump. And it was just that a few days after that that I began to hear about the virus. Perhaps experts knew about it earlier than that, but it seems that just as the U.S. reached this trade deal the virus really accelerated.

So I want to talk a little bit with you about how this virus is likely to affect that trade deal. It's got different elements, but a key part of it was that China is supposed to buy a lot more products from the United States. I calculated China would have to increase its purchases from the U.S. by 40 percent during 2020 and another 40 percent during 2021. As you know, we don't normally see macro variables grow at those kinds of rates, and now the corona virus comes. So do you have some thoughts on how this is perhaps going to affect trade between the U.S. and China?

MCKIBBIN: Well I think the trade deal was a very bad trade deal. It was distorting markets at a global level quite severely and it was based on assumptions that I think were invalid. But mostly, based on the idea that you could turn around the U.S. trade balance, with China or globally, where the U.S. is running very big trade deficits by forcing countries to buy more goods. The trade balance in the U.S. is the result of the U.S. saving less than it invests. And so, the capital flows into finance, both […] the government as well as investment banks, private savings, and […]. And then this leads to a strong dollar, weak exports, strong imports, and trade deficits. So the trade deficit itself was the source of the friction, and the policies in the negotiation, the policies in the trade deal did not address that issue at all. And so it was doomed to fail whether or not we had the coronavirus. Adding the coronavirus to it means that it's almost certainly going to fail. So I just think it was unfortunate it happened when it happened, but I think it's really going to put pressure on the Trump administration to think through the sort of policies that they need to undertake. From our point of view, the U.S. citizenry, you don't have health insurance available. But also, thinking through how sensible some of these trade policies are in reality.

DOLLAR: I sympathize with your assessment that a lot of that really smacks of managed trade, which is not particularly efficient. There are different elements of it; China was supposed to buy more agricultural products. That may actually work out during 2020 because we don't really know yet what the effect of this supply shock is on Chinese agriculture. China may need to import more food.

But energy use in China is down by 30 percent, so the notion that the U.S. is going to be selling large amounts of energy to China, that seems really unlikely. And services are supposed to increase. And the U.S. main service exports would be the 400,000 Chinese students in the U.S. plus Chinese tourists. All of that's obviously ground to a halt during the first few months of 2020, and it will recover from that, but it's just hard to see you're going to get increases in these variables in the way that the U.S. administration has desired.

MCKIBBIN: No, that is exactly right. And the other issue is what it does to third countries. In particular, you know, if the U.S. is going to be exporting more services to China, it's likely that someone else will be exporting a lot less. And, again, in that sense from the Australian perspective, we get hurt on services, we get hurt on agriculture, we get hurt on tourism, and we get hurt on our student exports with education. And so, not only is it impractical, it's also pretty dangerous in a global system to be putting this sort of distortions into a system that should be based on open markets, not based on political ideas of how the world works when, in fact, it seems inconsistent with our best knowledge of economics.

DOLLAR: That's a good lead into the last topic I'd like to take up with you, Warwick. So, I agree with you, this kind of managed trade that the administration, the U.S. administration, has been pushing kind of undermines the real global open trading system. I guess I want to ask whether or not this virus is going to have a similar kind of effect: really damaging the global trading system in the sense that are we going to see reshoring of activity because firms are afraid of global value chains? Are we going to see a backlash? I understand that's very speculative, but I just wonder, is this the kind of crisis where two or three years from now it'll be something of a distant memory? Or do you think this is potentially going to have a very significant effect on how globalization plays out from here on?

MCKIBBIN: Well, that is a really good question. I think there are different schools of thought of this. One thing, for sure, is that I think there will be a lot more diversification in production chains. People will spread their resource chains more widely. And that doesn't necessarily mean onshoring. It can also mean spreading it across a larger range of countries. In fact, that would be a risk strategy that bringing it back to your own economy that […] a national shock. When of the beauties of having global trading openness is that you can spread that shock globally. It's a benefit to open and diversified. So diversification will clearly be improved, and whether that leads to more onshoring it's completely unclear. The benefits are maybe a bit more certainty, but then the risks are, as I said, you may have a domestic shock which leads to a bigger lost. And secondly, the costs of onshoring would still be substantially larger – the costs of doing business – than spreading the production chains across a range of countries that all have very low costs. […] all being hit by the same problem at same time. So it is a very important decision for a lot of corporations, and I think some will make the decision to bring it back to their own countries, but many will just be spreading the production chains more widely around the world.

DOLLAR: Right. And also, some of that diversification might be within China. It remains to be seen how this plays out, but the impact has been very heavily concentrated in Hubei Province to start. That may not last, but a lesson that comes out of this might be that an awful lot of certain industries were concentrated in Wuhan, the capital of that province. And you might just want to diversify around China, which is obviously a big, diversified country. And then you've got nearby other developing countries like Vietnam, Indonesia.

So I guess I'm skeptical you'd see much reshoring back to a rich country like the United States, partly because we don't really compete with China in most activities. The things China's doing in the supply chain, if they're not going to be in China, they're likely to move to another developing country. They're not likely to come to an advanced country with much, much higher wages.

MCKIBBIN: Yeah, the argument for this is that this is not the first time that this has happened. We had a great experiment with the […] when production was concentrated in Thailand and it was shut down for a period of time. And so we have had this happen before and no one really responded to that. We've also have outbreaks of bird flu, swine flu, SARS, and that didn't seem to change corporate behavior very much at all. So I agree with your idea: Conceptually this should lead to an adjustment, but practically we haven't adjustment in the past. So I'm hoping that this time people will take it seriously. They have to change the way they do things, both from an economic point of view, but also from a public health point of view.

DOLLAR: So I'm David Dollar and I've been talking to Warwick McKibbin. We've been talking about the economic impact of the coronavirus, tremendous uncertainty, a lot of different scenarios. But Warwick, thank you. Your analysis has helped me understand some of the possibilities. And it seems the costs are going to be pretty significant under any scenario. Hopefully we'll get effective government action to limit those costs.

MCKIBBIN: I think that's right. Thanks very much for the opportunity, David.

DOLLAR: Thanks for joining me.

Thank you all for listening. We'll be releasing new episodes of Dollar & 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.

Dollar & Sense is a part of the Brookings Podcast Network. It wouldn't be possible without the support of Shawn Dhar, Anna Newby, Fred Dews, Chris McKenna, Gaston Reboredo, Camilo Ramirez, Emily Horne, and many more.

If you like the show, please make sure to rate it and leave us a review. Send any questions or episode suggestions to bcp@brookings.edu. And, until next time, I'm David Dollar and this has been Dollar & Sense.