

The Impact of COVID-19 on Climate Change and the Implications for Private Markets

Will Robson: So I've been talking to clients for quite a while now about the impact of Covid 19 on real estate markets generally and the impact on performance and investment trends.

Through those conversations, you obviously have discussions about which parts of the real estate market may be more impacted than others. So the obvious ones are around: business travel has all ceased, there's no planes flying and the hotel sector is suffering - particularly retail - no one's going out shopping.

Just in general, we've seen lots of reports around carbon emissions reducing in those areas that have been particularly affected by Covid 19, and people have highlighted that as a kind of a silver lining to a very dark cloud and suggested that there could be some longer term impacts helping with the climate change problem that we face.

I know you did some research recently to look into that into some more detail and really question whether we might see any long-term benefits from changes in behaviour. But could you tell us a bit more about the work that you've done and what that analysis suggests?

Oliver Marchand: Well, I think through this lens of working from home and doing less travelling, I think a lot of people get the perception that Covid 19, as you said, at least, is a big win for the climate. Now, we started bottom-up calculating if you were to scrap all airline emissions from the world's global emission accounting, what impact would that have? And we were really surprised that the impact was very low from what we calculated. So we thought is there a more informed kind of way that we could do at MSCI to predict 2020 emissions?

And, obviously, MSCI is a big index company. So we were thinking, how about if we look at the past 30 years of emissions and index performance? And the first thing that you'll see is that for the past financial crises, you would oftentimes see a big dip in broad indices like the MSCI ACWI Index. But the surprising thing is that the emissions dip, it's much less pronounced. And, it just shows that even though a financial crisis might be present, the emissions don't drop as much as we think. And what we also saw in the data is that oftentimes there's a very fast rebound mechanism happening. And so we built the best correlation model that we could using indices that are very related to climate change like materials energy, and found a 90% correlation between last year's index performance and the next year's emission levels. And we applied that model to the index levels that we see right now, and we came up with a very similar calculation like in the original bottom-up model where we just looked at airlines, and, unfortunately, if you look at what's needed in terms of reductions to meet the Paris agreement: the 2 degree goal, the 1.5 degree goal - this is really negligible. We need much bigger reductions to achieve those targets.

Will Robson: That's interesting. So the modeling that you've done shows a pretty minor impact on emissions. Is there a chance that previous financial corrections have had less of a deep economic activity impact and this correction is a little bit different, that you may have had similar falls in financial markets in the past, but the fall in GDP in broad economic activity over the last few weeks has been much more dramatic than in those previous [...] - so there could be a more of a drop, but even if there was more of a drop in emissions than the model suggests, it's likely that that still wouldn't be enough for us all go and lay back and think that we've done the job already. What kinds of changes in behavior are going to be necessary to do that? Is there a way to kind of contextualize the kinds of changes in activities that are necessary compared to those that are being experienced today, to give people a feel of when people say they've committed to net zero by 2050, what kinds of changes in behavior are going to be necessary to do that?

Oliver Marchand: Well, I think that there are some positive points to the Covid crisis. That's definitely true. I think one is that actually if we need to, and if we want to, then we can release massive financing to solve a global problem. And I would hope also - I'm not a diplomat or anything - but you know, I would hope that this crisis - because it has the same global nature as climate change, that it also strengthens global cooperation and sort of shows that we're all just human and that there are just some global problems that we need to tackle together. So people hope that it really strengthens international collaboration for global challenges. I think what's also an aspect that might help is that now in the Covid crisis, you have the medical professionals - the medical scientists - on the front lines advising politicians, because that's really what we need.

And I think we need that same kind of setup for climate change. We know a lot about climate change. Climate is very complex, like a virus is also very complex, and it's impossible for a layman or a politician to understand all of the intricate details of climate change. So I hope that this is a kind of view that we need - scientific professional advice on a topic - and we need to listen to it, and is also something that gets implemented in a much deeper fashion.

Also, I think it's an important learning for people that non-linear processes aren't something that we, as humans, are very good at processing, and climate change is in that same kind of way, you know how the Covid crisis, in the beginning, people were saying, 'well, we don't have many infections', then suddenly people understand it's not about the number of infections, it's about the multiplication rate. And it's the same thing in climate change. It's not about the temperature today - 'it's so cold' - but it's about the whole dynamic and it's about the question whether the melting of the Arctic ice or any other potentially nonlinear effect is going to accelerate really, really strongly. So I think all of these things are quite intertwined and it might help us to a better informed and faster moving world to solve climate change.

Will Robson: Yeah, I think you're right there - the complexity of the virus problem and the amount of hours of prime-time news devoted to explaining exponential curves - I think that kind of thing is the similar kind of nature of the problem with climate change. I think the main difference is the immediacy, or perceived immediacy, of the problem with Coronavirus, versus there's still the view that there's some sense that it's been changing over the last year or so - that the climate crisis is becoming more urgent - but, obviously, not to the same extent as Covid, but it seems from what you're saying, that the same level of urgency needs to be applied to the climate change problem.

Oliver Marchand: Yeah, I think real estate investors over the year of 2019 have seen really dramatic impact, and there are some obvious extreme weather impacts. One is the development of hurricanes. We've never had three - I mean Florida has never seen three Category Five hurricanes in a row, and that's something that sticks in people's minds. I think everybody remembers the wildfires in Australia. Floods have increased over the last decade. So I think people are more and more aware actually of these changes and are factoring in more and more of these extreme weather events into their analysis of property.

Will Robson: I would agree, I think even through this period of crisis related to Coronavirus, talking to clients, asking them about climate change or whether it's still high on their agenda, the answer is unanimously 'yes', and there might be some short term firefighting in terms of making sure the portfolio is dealing with the crisis now, but they still want to hear about climate change and understand what they can do. So, maybe you could just tell us a bit more about the work you do in the Climate Change Risk Centre related to real estate and the kinds of things clients are able to look at using the Climate VaR model for real estate.

Oliver Marchand: So usually when you do climate change analysis on any type of asset, I think it's pretty clear that you need to look at two elements. One is transition risks. Those are related to the low-carbon transition, meaning this transition that you talked about to getting to net zero emissions by 2050. And the major question here is: does the piece of real estate conform with energy regulations related to climate change or may that be stricter regulations which may really increase energy costs or may incur big renovation costs for installation or changing the heating system, installing solar panels or anything like that? That is the transition piece. And the other piece is, to what we just talked about, it's the extreme weathers, heat, flood, tropical cyclones - meaning very strong winds in the tropic region - and wildfires, are the most important perils or hazards, and the Climate Risk Centre models all of them, we model them for publicly traded equity and bonds.

And we also have a product for real estate portfolios. And real estate portfolios the analysis is a little bit more complex, because you need more input data on the properties of the real estate object - the real estate asset that we're looking at - but we're really getting more and more granular and we have a pretty long report. Once we upload a real estate portfolio, we have a pretty long report and that's what our clients like.

I think, as a start, to do what I would call a hotspot analysis, so that they think about: what are the most important hazards that we look at depending on the geography and the type of asset that you're investing into, and then also what kind of hazards are most important? And I think this hotspot analysis is very important because each real estate object is very complex, and oftentimes, to do a very comprehensive analysis, you would actually need more data. For example, on the energy consumptions and things like that. And you can't do it for a large portfolio at once. So, you need to start where it makes most sense.

Will Robson: So in terms of bringing this back to the start of our conversation about this belief that the Coronavirus may have some positive impact on our ability to achieve these kind of Net 0 targets, how do you think this kind of analysis you describe helps real estate investors to understand where their portfolio is in terms of contributing to those targets and, pulling its weight in the broader global efforts to get to these net zero or Paris alignment targets. Is it designed to help understand what can be done within the real estate portfolio?

Oliver Marchand: So we have two different types of metrics. One is the one you mentioned already, it's the climate value at risk. Climate value at risk is very similar to the traditional value at risk. It measures the portion of the asset that's at risk, the portion of the value of an asset that's at risk. It's usually expressed as a percentage number meaning -5%, -10% or maybe even a positive value, and we usually calculate it for each hazard or scenario that we have in our system.

And then the second metric that we have is called warming potential. And warming potential is more of a metric that measures the impact on climate change itself - contribution to climate change - and that is usually expressed in terms of degrees - meaning 2 degrees, 3 degrees, 4 degrees - and this can be used very well to measure alignment with the Paris agreement or other climate change targets or just to look at which assets in the portfolio are more aligned with certain targets and which ones aren't. So I think we have a metric for the different use cases that an investor might want to look at.

Will Robson: Okay. That's all very interesting. I think the summary of this conversation is that despite Coronavirus, there are still huge challenges ahead in terms of climate change, and a lot for the real estate industry to do to contribute to solving those problems. It's about applying global effort and analysis of real estate portfolios to contribute to that effort. But it's going to take a lot of coordination and collaboration to get that.

Oliver Marchand: Well I would like to say in summary that, given this analysis that we did, and if you look at past emissions data, I think my main point is that as time goes by the budget to reduce emissions - the time budget - becomes smaller and smaller.

And if we don't continue to do this analysis now and try to move in the right direction in terms of risk and impact, the less time we have and the steeper the curve will be. So that's why I would really advise all investors to look into this now, and to start the analysis now, because it's complex and it doesn't - until it can be transferred into action - there's a little bit of lag in there. And so that's why I think it's important to start the analysis now. Even though we have another crisis to deal with.

Will Robson: With the Coronavirus, there's a mantra around immediate action to flatten the curve. I think it seems that we need a similar mantra that translates into action for climate change.

Oliver Marchand: Yes

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