

# China, Stress Testing, and Factors: Market impacts during market crisis: Part 3

## *Featuring:*

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## **Mark Carver**

My name is Mark Carver. I'm the head of equity factors at MSCI, and I'm pleased to play host to you today for discussion around the level of uncertainty surrounding the coronavirus. Joining me today is my colleague Raina Oberoi, who leads our solutions research team in the Americas. Raina, thanks for joining me.

## **Raina Oberoi**

Glad to be here.

## **Mark Carver**

The purpose of our discussion is to address the number of questions that we're getting from clients all over the world around how markets are behaving given the heightened uncertainty in the spread of information and the spread of the coronavirus. We're going to break this discussion into three parts. First, we're going to look at this current epidemic and relate it to past epidemics, most particularly the SARS environment. Secondly, we're going to look at how portfolios might behave by talking about stress testing portfolios and the results of those stress tests. And finally, we're going to direct a very common question that we're getting from clients, which is how our equity factor's behaving, particularly model factors and the factor indexes. Are they behaving how we might expect, or do we see some unintuitive or unexpected results from those, both model and index factors? Let's talk about portfolios more broadly, right? So we know that people will often look at the equity market as a proxy for how markets overall are behaving. And if we look at the US market measured by the Dow, we're seeing moves of 1000 points or more on a daily basis and sometimes intraday even greater. Talk to us about the way clients can think at a broader level and stress portfolios to get an understanding of the way their overall portfolio might behave given this heightened volatility.

**Raina Oberoi**

Sure. And I think measuring that portfolio impact across asset classes is crucial, and we call that stress testing, but I think just to make sure everyone is speaking the same language, stress testing would be analyzing your portfolio. If there was an extreme event, what would be the impact on your portfolio? So it's really a what if scenario analysis given an extreme event, and you want to understand that what happens if X-Y-Z play out, which means assumptions are very important. So we did a couple of stress tests around the situation. Our first stress test was actually quite mild, where it assumed that this outbreak would be contained in China alone. So we used slightly less extreme measures. That has obviously changed now. And now that it's considered, I guess, today, a pandemic, it has a global outreach and a global impact. So we changed our stress test measures to something a little more extreme, where we undercut short term growth by 2%, and we increased the equity risk premium by 2% and by increasing the equity risk premium, what we mean is that now investors will demand a higher premium to invest in equities, which are considered more risky. So now once you run that scenario through a multi asset class model, you could consider it like a 60-40 model, what do you find from the base case? And when I say the base case means when this scenario did not play out and this is kind of the pre part of this world which we lived in not too long ago.

**Mark Carver**

So the base case, you're more dampened to a less intense scenario.

**Raina Oberoi**

Exactly. And base case scenario would actually be almost not even like, I would say dampened, but from the time the outbreak would have just started but you were not factoring in all these extreme scenarios. So what we find using this scenario analysis is that global equities and US equities would be down about 20%, give or take from the base case. And that actually, if you look at it, has already somewhat played out because this stress test was done a few days ago. And as you know, we just saw big moves in the market on Monday. We saw big moves in the market today. So what I could be saying today may be less relevant tomorrow, but as of today, this scenario has almost played out. We also, if you look at a multi asset class portfolio, that would actually be down 12%. And what we see is through this model that [INAUDIBLE] treasuries would gain about 6%, offsetting some of those losses. So actually the model's paid out pretty well. I think we have to figure out now what would be the next case and where tomorrow takes us.

**Mark Carver**

So I think the key takeaways for clients in this regard is that the stress test model itself allows clients to adjust the narrative based on their own views of how this pandemic now can play out, and then they can look at it from, not only their point of view, but their portfolio. What would this narrative in these scenarios mean to the portfolio that they have in front of them? And then they can make adjustments that are going to make the most sense for them. Is that a fair summation?

**Raina Oberoi**

Yeah, absolutely. We put out our assumptions, but the way we do them is always using our tools, and we have stress testing tools that we use in the same tools available to clients, so they could use their own scenarios. Some may be more bullish, some may be more bearish. So they can use different scenarios and different measures to figure out what the eventual impact would be.

**Mark Carver**

Yes. And given the speed of the way this scenario is playing out of this environment is playing out, I think this is the second or third time we've updated the scenario to try to be timely.

**Raina Oberoi**

Exactly.

**Mark Carver**

Raina, thank you for joining me on this three part series and thank you to all of our clients who have listened in on this three part series as well. We are committed to providing you ongoing realtime information to address this level of uncertainty and make sure you have the data that you need to make an informed decision. Visit our website at [msci.com/coronavirus](https://msci.com/coronavirus) or follow us on LinkedIn to see all of our real time information as well as all the blogs that we've produced, research that we've produced year to date. Thank you very much.

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