TRANSCRIPT

Riding Rail Through the Floods and an Ex-con Back in the Saddle at Samsung

Featuring:

Patric Kellerman, Climate Researcher, MSCI

SK Kim, ESG Researcher, MSCI

Bentley Kaplan (00:06):

Hello and welcome to the weekly edition of ESG Now where we cover how the environment, our society and corporate governance affect and are affected by our economy. I'm Bentley Kaplan, your host for today. On today's show, we are going to get into the complex and weedy world of physical climate risk as we unpack the reasons behind the floods that struck Germany in mid-July and what companies and investors can do about future risks. After that, we'll take a quick peek at the wacky world of corporate governance in South Korea and why some people in the country may be breathing a sigh of relief at the thought of an ex-con stepping back into the driver's seat of the country's biggest company, Samsung. Thanks for sticking around. Let's do this.

Bentley Kaplan (00:55):

Just a few days ago, the Intergovernmental Panel on Climate Change, or the IPCC, released its first major scientific review of climate change in eight years and spoiler, it's not good. The UN secretary general has called the report a code red for humanity. The main headlines are more extreme heat waves, droughts and flooding, and a prediction that we will hit 1.5 degrees of warming by 2040, even if we make drastic changes to our emissions. This report should intensify efforts to curb emissions. With COP26 scheduled for early November, national governments will be under the spotlight to commit to more aggressive targets and tangible action.

The same goes for companies and their investors that are becoming increasingly sophisticated at calculating carbon footprints and more ambitious in their pledges, but whatever the outcome of those mitigation efforts, however bold the target setting and however innovative the solutions, one thing is clear, investors and companies are going to need to prepare for more intense physical risks triggered by these changes in climate. One of these physical risks is flooding. Mike and I touched on flooding on the 23rd of July in the wake of catastrophic floods in Western Europe, which were most severe in Germany and Belgium. As flooding moved through several river basins, the scale and speed took everyone by surprise. In addition to extensive property damage and interrupted services, official fatalities were put at around 230.

On today's show, I've pulled in one of our in-house experts on physical climate risk, Patric Kellerman. Patric is based in Germany and works at MSCI's climate risk center. In addition to his role at MSCI, Patric is the perfect person to talk to about flooding. He's co-authored multiple papers on flood risk in Europe and like me, Patric has a special interest in railways. Before we get too deep into the weeds, I asked Patric about the flooding event itself and specifically, what went down in Western Germany in mid-July. What actually happened? Why it was so bad and why it seemed to take so many people by surprise.

Patric Kellerman (02:59):

First of all, we have seen extreme torrential rainfall, both in terms of the total amount of water, as well as the rainfall intensity, so the millimeters per hour, so to say. The convective storm that led to this torrential rainfall was really slowly moving. This was also a relatively exceptional characteristic. Another extreme characteristic of this event was the low retention capacity of many of the catchments where we had the precipitation, so-called high antecedent soil moisture conditions. We had wet soil with low additional capacity for water to infiltrate and to be stored in there. The sum of those aspects actually made this event really extreme and those extreme events are also very hard to predict. Most people in risk management work with so-called hazard maps to have at least a rough idea about potential exposure to flooding and what you've seen for this event is that existing hazard maps heavily underestimated flood potential.

Bentley Kaplan (04:06):

There are a lot of complex terms there, but basically we're talking about a lot of rain falling quickly over areas where it couldn't be absorbed in time. Small rivers became torrents and those torrents wreaked havoc, but the key point that Patrick makes is about how extreme this event was, how totally outside the frame of reference. Climate models, for all of their sophistication, don't really do well with these once in-a-thousand-year-type events and it's because this event was so unlikely that it wasn't really built into hazard maps or planning. It's not a perfect analogy by any stretch of the imagination, but think of a casino.

Quite simply, if you go with statistical likelihood, over the years, the house is going to win. It's going to take in more chips than it gives out, but every now and then, against the odds and in the space of just a few seconds, someone is going to hit some kind of jackpot or roll some incredibly unlikely dice. It's the kind of thing that a casino knows is theoretically possible, but because you can't really pick who will win or when, or how much, it's impossible to plan for it, impossible to know when to unplug the one-armed bandit or stop the roulette wheel from spinning, but we digress.

Even though these extreme events are impossible to predict, what is more clear is that not only are they going to become more frequent, but also that long-term changes in climate or manifest in more intense physical risk on average, which is what brings us to railways. Railways, in the context of physical climate risk, are interesting because they cover thousands of kilometers and for the most part, they don't really move. Managing physical risks across these vast networks is no small feat and one that may become more complex. It's a challenge that Patric knows something about. Drawing on his experience and research into physical risk and railways, he laid out how railways could look to prepare for physical risk.

Patric Kellerman (05:59):

A railway operator has, on a high level, different options to manage and cope with risks. I'd say the best ones are always a combination of what we call structural and non-structural measures. Structural measures, for example, could be classical protective measures, flood defense measures like dikes, installation of pretension areas, giving rivers more space to flood without any consequences. Non-structural measures are management measures like simply stopping railway operation if a flood warning comes in, all these kinds of things that are not directly related to build structures. There's a clear trend, and this is really good and this is also what is really recommended nowadays is to apply a so-called integral risk management approach, which really implies both of those components, structural and non-structural measures.

You always have to be aware as a risk manager or as a railway operator, in our case, that there is always residual risks that always remain. You cannot really put flooding risks or any natural risk to zero. That's why it's not only about reducing risk, it's also coping with risks. To prepare for events and their impacts, to develop plans for rapid disaster response mechanisms, all these kind of things. It's a very complex process and all of those individual components are very important.

Bentley Kaplan (07:30):

Right. That's pretty clear. In addition to preparing your infrastructure with physical adaptations like barriers, you need to build a response systems that help you pick up threats quickly and trigger responses in your operations that minimize damage and loss of life. One part of that risk management is to know where risks are most severe, where they might be changing over time. To fill that gap, governments, companies and investors are turning to climate scenario models. Minor plug, we at MSCI have our own one that we're pretty proud of. It's called Climate Value at Risk, or CVAR, for those in the know. I could spend a good hour getting into the details of our CVAR model, but hey, I know you have places to be. Let's just say CVAR is a way of estimating how future climate change could change the financial prospects of a particular company based on what business it's involved in or where its assets are based. While they are a great start, climate models like CVAR are just one piece of a pretty tricky puzzle.

Patric Kellerman (08:28):

The Climate VAR is a metric that really focuses on climate change-driven shifts in risk, such as flooding. It does not focus on events-specific assessments, but really rather follows a long-term statistical approach and tries, in the end, to come up with a risk delta between current and future times. We do not consider highly dynamic and diverse aspects, which local adaptation measures definitely are or can be. I mean, you can, depending on the measure itself of course, react in very short time. After a warning comes in, for example, you're still able to implement some protective measures that reduce the risks. That's something we cannot capture in our global and long-term models.

There's also a huge lack of data that prevents us from describing the effects of such adaptation measures, at least reflecting what really happens out there in reality. As an investor, I definitely would look into the risk management of the individual company because that's really key. It should comprehensive. It should be integral. There should be sound management strategies and companies, or any asset owners, but also make them transparent. They should disclose them. They should let people know because it's a very important aspect. Risk management also includes having strong partnerships to be able to cope also with extreme events and their consequences.

Bentley Kaplan (10:04):

Unsurprisingly, there is no simple solution. Preparing for physical climate risk means getting into the weeds of a climate model, understanding hazard maps and risk response systems. In one of Patric's papers, it came down to understanding the influence of interpersonal relationships in different stakeholders, how well people get along and communicate. It's complex. It's messy. It's a rubber hitting road and peppered with some things that we can't really quantify neatly, but it has to start somewhere. For companies, it's about figuring out their risk management strategies and communicating these to shareholders, to stakeholders. For investors, it's about understanding the risk models, but also knowing there is uncertainty and residual risk, things that are just part and parcel of physical climate risk. As you move into a time of code red for humanity, kicking these complex challenges down the road just isn't an option anymore.

Confession, one reason I do love being in ESG is that you can pivot hard from one complex messy topic, like physical risk to an entirely different, but maybe equally messy topic. We're going to leave flooding and rail and the sobering IPCC report behind us to pay a visit to Samsung, the South Korean titan because the company that employs nearly 300,000 people and pulled in $200 billion in revenue in 2020 has been in a kind of governance purgatory ever since the grandson of Samsung's founder, Jay Y Lee, was sentenced to 30 months in jail. The incarceration stemmed in part from Mr. Lee's alleged attempts to solicit government support for his succession efforts within the Samsung empire. As of the time of recording, after serving just six months of a 30-month sentence, the South Korean government was shaping up to release Jay Y. Lee on Friday 13, August.

Globally, this is big news, but in South Korea, it's huge news. To get a little closer to this story and to what it means for the local markets and its investors, I called up SK Kim in Seoul, and firstly asked for a little context on South Korea's so-called chaebol, the giant family-owned and family-run conglomerates like Samsung, LG, and Hyundai that although it can make for some lengthy corporate governance, schematics have been the powerhouses of the local economy.

SK Kim (12:31):

I think we need to start with why this type of special ownership structure has sustained in Korea for decades. If you go back to the governance 101, then there will be principal and agent problems. For Korean companies, it doesn't really have that kind of problem because the management or the CEO used to be taken by the largest shareholder of those large companies. There has been an alignment of interest between the agent and also the principal. The owners, also the largest shareholder, could make long-term strategic decisions. Korea, as an economy, has developed in a very fast pace, is stepping more into more of an advanced economy where more transparency is needed for the foreign investors to put capital into Korean companies.

Bentley Kaplan (13:25):

Okay. The chaebol ownership and control setup has been around for a few decades and recent governance reform efforts in South Korea have maybe neatened things up a little. Circular and opaque ownership structures have become less common, but one thing hasn't really changed all that much, control of these massive companies is still pretty concentrated within the same hands. Samsung is no exception. As SK pointed out, this control historically has allowed the company's owners, who were also its managers, to focus on long-term horizons. The flip side of this control is that you end up with a key person risk. It makes one, or two or three people, the linchpins of company strategy. For Samsung, although daily operations may not have been affected by Mr. Lee's absence, decisions on M&A, or major spending have reportedly been hamstrung. It's maybe no surprise that business groups have lobbied for his release and that the government's decision to let Mr. Lee out early has not really been met with popular outrage.

SK Kim (14:26):

Official reason behind this parole by the government was one, is that economically, it's very critical moment for South Korea during COVID. Samsung is the biggest Korean company, thus lacking leadership of the group could be detrimental not only to the company, but to the economy as a whole because Samsung, by far is the largest. Not everybody is unhappy about this decision. It's around 50/50, partially because of the political dynamics right now going on. Many of the people discontent with the current administration due to some of the political agenda. Some of the people saying they're using this event as a means to improve the controlling party's image. I think that's the major reason why some of the people welcome this news.

Bentley Kaplan (15:29):

It's complicated. Sure, maybe there was some questionable ethics behind the scenes and sure, maybe there was a little bit of bribery that ultimately led to the impeachment of the South Korean prime minister last time around, but Samsung in Korea is still a big deal. When the company does well, it doesn't mean only national pride, but income for local retail investors and maybe more meaningfully, employment for tens of thousands of South Koreans. Now off the record, SK described the intertwined fates of the government and South

Korea's biggest chaebols. That dynamic is what gives way to some slight quirks in how things look on paper and how they actually play out in reality.

SK Kim (16:11):

Nobody is questioning that Mr. Lee is going to be the leader of Samsung Group. In the paper, if you look at Samsung C&T, which is the ultimate holding company of Samsung Group, Mr. Lee is not a registered director. That's the reason why in the newspapers, people really love to say the word de facto. Since Mr. Lee has the criminal record, he is not eligible to sit on board or be an executive in the companies, but everybody knows that he's going to make a group decision where the company's heading in to 10 years. There is still going to be a leadership concern. Although in paper, there are separate CEOs, separate chair. It's just still the group leader who makes the most important decision is going to be Mr. Lee.

Bentley Kaplan (17:13):

Spoiler, here's the part where I try to find a neat bow to wrap around two very different stories, flood risk in an increasingly precarious world and the lofty heights of chaebols in South Korea. Let's try this on. As SK told us, the family-controlled chaebols in South Korea may be the powerhouses of the economy and Korea's economic rise may not have been possible without these giants, and their prominence may be the reason why the return of Jay Y. Lee is seen in a generally positive light, even if he is returning from a prison cell.

For some of the company's minority shareholders, there is considerable uncertainty, both in the short term over how exactly Mr. Lee will be able to take up the reins with a criminal record and whether further charges will be leveled, and what that could mean for his leadership. Also, uncertainty in the long-term because as recent events have so clearly illustrated, there is a big difference between the company's leadership structures on paper and how things work in reality, which can create some serious headaches when it comes time to vote on company decisions. And how planning works with this long-term uncertainty echoes through into our second story for anyone trying to manage railways or invest in them. Thousands of kilometers of track sitting pretty as the forces of climate change unfurl. Looking decades into the future of those railways could change the way that we account for the steep upfront cost of adaptation measures, risk mitigation planning, and building partnerships between stakeholders, all of which are critical ingredients if we're going to get a handle on physical climate risk.

That is it for the week. A massive thanks to Patric and SK for their take on the news with an ESG twist. Thank you very much for tuning in. Do rate us and drop in a review if you can squeeze it into your schedule. While we're asking, don't forget to subscribe to the show so our episodes can find their way to you wherever you might be. If you're enjoying what you're hearing on our show, don't forget to check out MSCI's Perspectives podcast hosted by the silky smooth Adam Bass as he talks to some of the heavy hitters of the financial world about a pretty diverse collection of topics. The most recent episode took a look at climate stress tests with Matthew Lightwood and our very own Andy Sparks. I'll leave you with Adam as I sign off. Don't forget to join us again next week with some more ESG magic. Bye for now.

Adam Bass (19:40):

Hello ESG Now listeners. I'm Adam Bass, host of MSCI's Perspectives podcast. On our latest episode, we take a practical look at how stress tests are key tools when it comes to managing climate risks and opportunities in a portfolio and for imagining the unimaginable. You can listen to Perspectives wherever you listen to podcasts.

Bentley Kaplan (20:02):

TRANSCRIPT

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