Physical risks, scenario analysis and why location matters

On June 11, **Tell Media Group**, in cooperation with **BMO Global Asset Management**, **Janus Henderson Investors** and **Wellington Management**, invited Swedish investors to discuss climate change and asset allocation. Tell Media Group founder Niklas Tell and Nordic Fund Selection Journal editor Caroline Liinanki moderated the roundtable.

By: **Niklas Tell**

As participants gathered in front of computer screens rather than face-to-face in Stockholm due to the current meeting and travel restrictions, Caroline Liinanki initiated the discussion by asking about the timing for considering the climate change impact on portfolios: is now a good time, is it a bit late or perhaps a bit too early?

LARS-GÖRAN ORREVALL: "I would say that you're late in the game if you start to look at impact from climate change today. This is, however, a long-term game and climate change will be important for portfolios for a very long time."

MARCUS SVEDBERG: "I absolutely agree but you're also asking a group of peers that are quite active in this space. I think you might get slightly different answers from a different selection of asset managers and asset owners. However, it's one thing to consider climate change impact and make the analysis but the question is how to act on it: how are you adjusting your portfolio according to whatever you come up with in your analysis? Also, asset prices tend to reprice before changes actually happen, so I think it's probably better to be too early rather than too late. I don't think we will see a nice linear change – it's probably going to be quite abrupt when it actually happens."

VICKI BAKHSHI: "One thing that we hear quite a lot regarding physical risks is that it's about the long-term and that you need to look ahead several decades. I think it's a dangerous misconception if you think that you don't need to worry about this now. We're already seeing examples of how climate change is affecting us – it's not something that will hit us in the future but it's hitting us now.

WENDY CROMWELL: "We see that 18 of the 19 warmest years on record have occurred since the year 2000, so we're clearly progressing with regard to physical climate risks. But a lot of people still say that physical climate risk are too far away to matter. More focus is therefore put on transition risks: when our policymakers are going to make different choices or when consumers are starting to make different choices. Actually, when we launched our physical climate risk research partnership with Woods Hole Research Center, one of my learnings was that regardless of change in behaviour in terms of mitigation, a lot of implications are already baked into the system when it comes to physical climate risks. Also, those physical climate risk impacts are more severe than I expected and not priced into capital markets yet."

STEVE WEEPLE: "We come at this from the perspective that it's not about timing at all and we think that it's already affecting consumer choices, government regulation and capital investment. We think yesterday was absolutely the right time to consider this but tomorrow will be too. We think this transition to a much more sustainable economy will have a myriad of investment impacts, both opportunities and risks, and you can already see the type of companies that are beneficiaries and you can see the companies that have business models and financial risks associated. We think this is part of what you now have to do as an investor."

MARIE GIERTZ: "I agree with what everyone has said so far and I don't think it's too late to consider these issues since it's a long-term game."

MARCUS SVEDBERG: "I think one interesting dimension here is a feedback loop between transition and physical risks and that's something that's very difficult to build into your models. The more obvious and severe physical risks we're seeing in the near term, the quicker the transition is going to happen. As we see physical risks, such as bushfires and flooding, this may actually become one of the main drivers of transition change."

NIKLAS TELL: FROM A MORE STRATEGIC PORTFOLIO PERSPECTIVE, HOW HAVE YOU BEEN WORKING WITH CLIMATE CHANGE?

MARCUS SVEDBERG: "Like many others, we've had low CO_2 overlays in our more passive portfolios. We try to combine that with more fundamental overlays, which are not always easy when it comes to passive portfolios and I'm very curious to hear how others are doing that. In our more actively managed portfolios, which for us would be our Swedish equity portfolio, we can be more active and select individual companies. What we have done a lot over the past two years is trying to integrate all of these various efforts into a more coherent strategy and also to integrate the climate scenario analysis into our overall macro-economic scenario analysis. We're trying to have one investment strategy where climate is one important element and as we get hold of more and better data, we're trying to integrate that. Whatever we come up with in our climate scenario analysis applies across assets but the implementation will differ for different parts of the portfolio. It will be more quant-based for the semi-passive portfolio and more bottom up in the active portfolio. Then, there's a third way to implement for alternatives and so on."

VICKI BAKHSHI: "We agree that you have to have one strategy but there are some asset classes that are more exposed to the risks and opportunities. For example, with infrastructure you can get exposure to renewable energy. It's more challenging in listed equities. There's simply a difference in how easy it is to implement your strategy across different asset classes."

LARS-GÖRAN ORREVALL: "We've actually done some changes as we've tried to mitigate risk from a total portfolio point of view. One of the changes has been to increase the infrastructure part of the portfolio. That was partly because of climate change but partly because of fixed income having a low yield today. We're trying to be in line with the Paris agreement for the total portfolio, so we're looking at all fossil intensive investment across asset classes and are trying to reduce that and at the same time increase our green investments."

MARIE GIERTZ: "The overall goal is to deliver returns to the members and in order to deliver that, we need sustainable goals. On a strategic level, we aim to reduce the carbon

PARTICIPANTS

- **MARIE GIERTZ**
  Chief investment officer of Kåpan Pensioner
- **LARS-GÖRAN ORREVALL**
  Chief investment officer of Skandia
- **MARCUS SVEDBERG**
  Investment strategist at AP4
- **VICKI BAKHSHI**
  Director responsible investment team at BMO Global Asset Management
- **STEVE WEEPLE**
  Client portfolio manager for global and EM equity strategies at Janus Henderson Investors
- **WENDY CROMWELL**
  Director of sustainable investment at Wellington Management

MARIE GIERTZ
Chief investment officer of Kåpan Pensioner. Before joining Kåpan in 2016, she worked as chief economist at the Swedish Export Credit Corporation and she has also worked as chief economist at Länsförsäkringar.

LARS-GÖRAN ORREVALL
Chief investment officer of the Swedish life and pension company Skandia. Prior to taking on the role in 2018, he was CEO of Skandia Investment Management, its asset management arm.

footprint and we also have metrics for ESG scoring. We've started with listed equities, partly because it's easier to get metrics on that. We're, of course, also looking at other assets and we've increased our exposure to infrastructure. We also see that a lot is happening in real estate. You still need to approach each asset class differently."

STEVE WEEPLE: "I'm coming at this from the perspective of public listed equities and if you're only looking for green energy companies or renewable companies, you just don't get diversification. What we're doing is to look wider and ask what other business models that are benefiting from this transition. Then you can look at things like insurance companies and insurance consultants that are helping companies mitigate the risk of this transition. You can look at software companies that are producing much more efficient tools and you can look at consumer goods companies that are embedding the circular economy into how they produce and sell their products. If you're just looking for green energy companies, you will really struggle to put together a durable, sustainable and diversified portfolio."

WENDY CROMWELL: "I spent a large portion of my career as a macro investor and as I started to look at physical climate risks, I expected to be able to come up with macro implications and GDP variations based on this research. What I've found is that there's a lot more variability within regions than I expected and it's a lot more nuanced than I expected. To make grand sweeping statements about particular countries or regions is difficult. I would say that whether you're looking at private infrastructure or listed securities, location should become more of an input into your analysis than it ever has been in the past in order to accommodate this physical climate risk research and the implications of physical climate risk. So in addition to the mitigation in the carbon footprint and thinking about green bonds, investors really need to look at location as an input to their discounted cash flow models. It's really quite critical to investment today."

CAROLINE LIINANKI: WHAT ARE SOME OF THOSE DIFFERENT ASPECTS AROUND LOCATION?

WENDY CROMWELL: "One of the variables that we've studied has been heat and one of the metrics that you can use to study heat is something called the heat index, which is the intersection of temperature and humidity. Once you've identified that as an appropriate metric to look at, because of the impact on human physiology, you can create pretty granular maps across the globe that show how that metric changes decade over decade, time period over time period and geography by geography. We've looked at how many more heat days you are going to get in one region versus another region. As an example, some of the emerging markets are going to have four additional months of danger and extreme danger heat days unfolding over the next one to two decades, depending on your measurement. Or take Houston, Texas as a US example. There we will have two additional months of danger and extreme danger heat days unfolding within the next decade and that's additional months to the heat that's already experienced. So once you understand that, you can start to look at where different securities are located and analyse what the potential implication on value would be. Going back to the Houston example: if you look at a bond that's issued to invest in the Texas area versus one that's invested in another municipal bond area, you can find two bonds that are exactly the same when it comes to financial characteristics but they have these very different climate outcomes. So all else equal, why would you choose the one that has more climate risk? If you start to look at location, you can apply that to equities as well and look at companies that have big exposures to property, plant and equipment or you can look at regional banks that have big loan books to areas that are going to be compromised. In this way, you can start to think about location as an input to understand if a security has location as a basis for its value and understand if that's in the price."

VICKI BAKHSHI: "Physical risk is something we need to be looking at and I think there's a reason why investors have so far not looked at this as much as transition risk and that's because there are some really daunting data issues. For many investors, this is a pretty difficult area because you really need to get very granular with the data. We have direct real estate investments and we've worked with an external consultant to help us put some of that data together. Together we've been working on identifying changes in things like rainfall and temperature and mapping that against the data that we have as a property owner to understand how exposed different types of buildings are to various risks. We hope that this will give us a good physical heat map for property but it's not easy."

MARCUS SVEDBERG: "This is obviously one area where data is a major issue and I guess it's going to be a major issue for quite some time. It's not only to get the data but you also have to match that data with a different set of data. On a related note, I've spent most of my career on emerging markets and whatever I read about physical risk makes me really worried. It's, of course, not only about emerging and frontier markets but that's where the preparedness is the lowest. To me, that's a big concern."

WENDY CROMWELL: "Marcus, I think you brought up a great point. It's not just that the climate data is tricky but you have to layer the data on the location data that you have for the companies. One of the skillsets that I never thought I would need in my investment team is someone that we just hired last year and that was a geospatial engineer, which is someone who helps with layering that type of data in this process."

NIKLAS TELL: GOING BACK TO THE BASIC QUESTION OF HOW CLIMATE RISKS IMPACT YOUR INVESTMENTS – HOW MUCH OF WHAT YOU DO IS TOP-DOWN, SAY AVOIDING REAL ESTATE IN CERTAIN LOCATIONS, AND HOW MUCH IS BOTTOM-UP, FOR EXAMPLE ASSESSING THAT ONE BUILDING IS BETTER THAN ANOTHER?

LARS-GÖRAN ORREVALL: "We're not a large organisation and we have some 80 people in asset management working on a very big portfolio. We must therefore focus on top-down issues. We're not stockpickers in all markets and we don't have real estate all over the world. It's really interesting, however, to hear about the analysis on location but if we would do that, we would use an external manager rather than do it ourselves. For a big portfolio, the strategic asset allocation is really important and we've done some changes there. We've also worked on the benchmarks we use to see what to increase and what to exclude from the portfolio. Then you, of course, have all the portfolio managers we use that are trying to do the right selections. It's really about working on all these three levels and I think all three levels are important."

VICKI BAKHSHI: "I think it needs to be a bit of both. A top-down perspective will give you a heat map of risk and even if it's an approximation, it gives you a systematic way of figuring out what your biggest risks are. Then you need the bottom-up as well to give you a more granular view of how those risks may play out."

MARIE GIERTZ: "We're a small organisation and we've tried to take small steps in this area. We've focused on the listed equity space where we have access to different metrics. We run the portfolio in a very quantitative way and then you can start with a broad benchmark with all companies and then screen using different ESG and climate metrics."

STEVE WEEPLE: "I would say that from the conversation we're having, it's pretty clear that there are some very granular decisions to be made here. If you only work top-down with your asset allocation decisions, you're missing the fact that different companies in different locations with different end markets are going to have very different experiences of this transition. Yes, we understand that if you look from a top-down perspective, there will be asset allocation decisions and geographic decisions to be made but we think that active management has a big part to play here because companies that look as if they're doing broadly the same thing might actually be facing very different risks."

MARCUS SVEDBERG: "I think it's very important to be clear about the distinction between normative and factual reasons for what we're doing. For us, we have an ethical council and whatever they decide, we have to follow. When you move into more factual reasons, you need to consider where to draw the line. Where is materiality kicking in? I also think that we need to consider if we do things to reduce risk or increase returns, or if it's a combination. We simply need to know why we're making certain decision."

VICKI BAKHSHI: "That's an important point and I think it's good to take a step back and think about why we're looking at climate change. I think we all agree that climate change is a financial issue but there are two lenses of looking at this, which we see when we talk to our clients. There's a lens of looking at this as purely a financial issue and ask what impact climate change will have on my portfolio. Then there's a different angle that's this more normative or ethical angle, which is about what impact my portfolio is having on climate change. That's more of a purpose-driven lens and there are many asset owners that would like to have a positive impact on climate change and to work on that through their investments. They're taking more of a macro perspective on this and saying that in the long term as an investor, my interest is in a stable global economy and if we don't tackle climate change, we will not have a stable global economy."

STEVE WEEPLE: "I would say the two are not mutually exclusive and can absolutely go hand in hand. Investing in companies that are beneficiaries or driving positive change can also be a great way to make money."

MARCUS SVEDBERG: "I agree. There's a lot of common ground but I also think that analytically, it's important to know if it's one or the other. You can have investments that are climate-friendly but bad financially, so we need to be clear why we're doing things."

MARCUS SVEDBERG

Investment strategist at the Swedish national pension fund AP4, focusing on macro trends and sustainable investments. He previously worked as the official Swedish adviser in the World Bank Board in Washington DC and as chief economist at the asset manager East Capital.

VICKI BAKHSHI

Responsible investment specialist at BMO Global Asset Management. Her focus is on advising the firm on climate change and impact reporting. Prior to working at BMO, she spent five years in the UK government, including as Prime Minister Tony Blair's policy adviser on climate change and as a senior member of the team responsible for the Stern Review on the Economics of Climate Change.

CAROLINE LIINANKI: ONE OF THE EMERGING TRENDS AMONG INVESTORS HAS BEEN TO MAKE CLIMATE CHANGE SCENARIO ANALYSES OF THE OVERALL PORTFOLIO. WHAT ARE THE BENEFITS AND THE DIFFICULTIES IN DOING THAT AND WHY SHOULD YOU TAKE THIS OVERALL PORTFOLIO VIEW INSTEAD OF, FOR EXAMPLE, JUST FOCUSING ON SOME OF THE MOST PROBLEMATIC PARTS OF THE PORTFOLIO?

LARS-GÖRAN ORREVALL: "We did a climate scenario analysis a couple of years ago and we used a model available in the market. We wanted a top-down review because if we only would look at the public equity part, that's just 20 to 25 per cent of the total portfolio. The analysis looked way into the future on how much the temperature goes up and what kind of transition risks and physical damages there would be. Of course, it's very difficult and I would say that the numbers we got from that analysis helps us in what kind of questions we need to look at when it comes to climate change. Climate change is important but it's only one of the things we need to look at in order to get a complete picture of what might happen going forward. We've also looked at geopolitics, for example."

MARCUS SVEDBERG: "We also did a scenario analysis a couple of years ago and I think for us and for many organisations, it's a way of formalising things you already do. In a way, it's taking the climate thinking from the communication department into the asset management department. I think the challenge, whatever conclusions you reach in your analysis, is how to implement it in the portfolio. Also, a climate scenario analysis is not a one off – it's something you need to work on continuously."

NIKLAS TELL: I KNOW THAT YOU USE A LOT OF INPUT TO COME UP WITH YOUR ASSET ALLOCATION BUT IF YOU WERE TO ONLY LOOK AT YOUR CLIMATE SCENARIO ANALYSIS, HOW MUCH WOULD YOUR ASSET ALLOCATION CHANGE? WOULD IT BE A TOTALLY DIFFERENT PORTFOLIO?

LARS-GÖRAN ORREVALL: "No, it wouldn't be a completely different portfolio. There are, however, a lot of important questions that come up when you start to think about climate change and at the end of the day, we're trying to mitigate risk and this can help us identify where the biggest risks are. At the same time, you would like to identify opportunities and then you try to change the portfolio in that direction."

MARCUS SVEDBERG: "I agree. I don't want to look at this in isolation – that's the whole point. I want to integrate this as much as possible and have one scenario planning where we incorporate macro, financial risks, climate risks etc. But to answer your question: looking at climate risk and CO_2 in isolation, we would probably have even more Swedish equities and much less emerging market equities given the CO_2 intensity."

VICKI BAKHSHI: "I think one of the most important aspects of doing climate scenario analysis is going through the process. Any precise number you get to in the end will probably be wrong but it gives you an idea of the order of magnitude and running through the process of challenging internal assumptions is hugely valuable. It's an internal education."

CAROLINE LIINANKI: MARIE, HAVE YOU DONE ANY CLIMATE CHANGE SCENARIO ANALYSIS OR IS IT SOMETHING YOU'RE THINKING ABOUT DOING?

MARIE GIERTZ: "We've started but we haven't done an overall scenario analysis of the complete portfolio. We've looked at our listed equities to see what would happen if there would be a global carbon tax, for example. There's, of course, a lot more to be done but as was mentioned earlier, it's interesting because it's a learning process. I also agree with Marcus in that we need to integrate this and not look at climate change in isolation. We want to have a diversified portfolio in order to deliver sustainable returns over time and then we can't sell out from emerging markets and only focus on Swedish equities."

> "Carbon footprint is a good measure but it could lead you very wrong if you simply divest based on a large carbon footprint"
>
> *– Lars-Göran Orrevall, Skandia*

STEVE WEEPLE: "I think one of the challenges we face in our interactions with clients on these issues is around transparency, definitions and reporting. How are we giving our clients assurances that we're running a low carbon portfolio and that we're considering climate change in all of our investment decisions? This is a challenge for the whole industry and I think scenario analysis is one of the ways that you can prove your methodology. It's one of the tools at our disposal to help us communicate with clients, to show them into the gut of the portfolio and give them the confidence that we're doing what we say we're doing in terms of managing and mitigating these risks."

WENDY CROMWELL: "I would like to talk about some of the challenges of carbon footprinting and scenario analysis. First, all of this data is highly imperfect and I think we should acknowledge that but at the same time, it's important to start. However, one macro issue is that most carbon footprinting is done at scope one and scope two, so when you start to make security level decisions, it could force your hand to make odd decisions because you're not incorporating the use case for the products. The classic example of that is electric utilities, which tend to have a higher carbon footprint than traditional oil and gas. But do you really want your asset manager to sell electric utilities that are investing in renewables in order to hold on to their traditional oil and gas securities? That's probably not your intention. Another issue is that both carbon footprinting and scenario analysis tend to focus primarily on transition risk and emissions and I just can't emphasise enough how compelled we are to think about physical climate risk. The implications are graver and will come sooner than we expected and people are also less familiar with those implications. We need to be able to work on mitigation, which is associated with transition risk, and adaptation at the same time to build resilience and we can't get there unless people are more familiar with the physical climate risks in their portfolio or in their company."

MARCUS SVEDBERG: "I agree but even if we would have perfect scope three data, I still think you need to combine that quantitative screening with fundamental analysis. The quant part gets you only so far but then there are a lot of decisions you just need to make and that's where the fundamental understanding comes in. It sounds very straightforward but if you have a passive portfolio, should you then start having fundamental overlays? I think it's absolutely doable and it's something we need to spend much more time on but it's complex."

LARS-GÖRAN ORREVALL: "Carbon footprint is a good measure but it could lead you very wrong if you simply divest based on a large carbon footprint. We've looked at all our holdings in carbon-intensive industries and have tried to divide them into companies that will or could be in line with the Paris agreement and companies that are unlikely to be in line with the agreement. We think that companies that are on the right path are likely to be the winners and we would rather be invested in them. Just looking at the carbon footprint in isolation would be the wrong solution."

NIKLAS TELL: WHAT ARE SOME OF THE CHALLENGES IN TRYING TO INTEGRATE YOUR TOP-DOWN CLIMATE ANALYSIS WITH WHAT AN EXTERNAL MANAGER DOES? IS IT MAINLY REPORTING OR ARE THERE OTHER CHALLENGES?

LARS-GÖRAN ORREVALL: "We have a blend of internal management and external managers and we're looking for external managers that are thinking in a similar way to us. Sometimes we find very good managers that are not really thinking in the same way as us and then it's difficult for us to invest with them. Also, our main focus is the total portfolio so an external manager must fit into our portfolio in some way. It can't be the other way around."

NIKLAS TELL: WOULD YOU SAY THAT THE CULTURAL FIT WITH AN EXTERNAL MANAGER IS MORE IMPORTANT THAN, FOR EXAMPLE, REPORTING?

LARS-GÖRAN ORREVALL: "When it comes to the equity portfolio, we can look through all portfolios and see all the underlying securities, so reporting is not an issue there. It's much more difficult in private equity. But in short you're correct. Finding good managers that are thinking in the same way as us is what we're aiming for."

MARCUS SVEDBERG: "I would just like to add something, which will sound horrible. I'm not so interested in meeting green bond people and I'm not so interested in meeting sustainable finance teams. I'm much more interested in meeting bond people that have thought about sustainability or portfolio managers that have really thought about sustainability. This is not because I have anything against green bond people or sustainable finance people – they're fantastic – but I'm much more interested in making sure that sustainability and climate transition is really integrated, whatever strategy we're investing into. I think things have improved dramatically just in the last two or three years but

STEVE WEEPLE
Client portfolio manager for several global and emerging market equity strategies at Janus Henderson Investors. He joined Janus Henderson in 2017 after 16 years at Standard Life Investments, where he held a number of senior positions, including global equity portfolio manager, director of equity research and head of US equities.

WENDY CROMWELL
Director of sustainable investment at Wellington Management, setting the research agenda and strategies for the firm's sustainable investment practice, including impact, climate and long-term engagement strategies. She is a senior member of the firm's management team and works with the CEO on strategic initiatives and external affairs.

we're still seeing differences between asset managers in terms of how far they've gotten in this process."

NIKLAS TELL: WENDY, WHAT CHALLENGES ARE YOU SEEING IN YOUR RELATIONSHIP WITH CLIENTS?

WENDY CROMWELL: "I don't know if it's a challenge but whenever there's a desire to do something bluntly in an area where there's a lot of nuance, I think there can be a conflict. You may have some folks, with all the best intentions, that want to do something really bluntly, for example have a certain carbon footprint. We would rather have a more nuanced discussion. Not because we're trying to avoid doing something but because we want to do it better or do it in a way that's going to have more of an impact. So I think that can be kind of a tricky conversation because some people will have more of a bandwidth for that discussion and others will have less of a bandwidth for that discussion."

STEVE WEEPLE: "I agree with what Marcus said earlier. We're not the ESG guys – we're the global equity guys that are looking at climate transition risk and migration to a much more sustainable global economy and that's something that just throws up a whole lot of investment opportunities. If you're a looking to be a good public listed equity investor, how could you possibly ignore all this stuff?"

CAROLINE LIINANKI: DO YOU THINK THERE'S A RISK THAT CLIMATE CHANGE COULD BECOME A BIT SIDELINED NOW THAT EVERYONE ARE FOCUSING ON THE GLOBAL PANDEMIC?

VICKI BAKHSHI: "The current situation is, of course, having a big impact in a lot of different ways. We've seen a short-term dip in emissions as a result of economic activity grinding to a halt but there are also longer term fiscal and economic impacts of this as well. For instance, we're seeing that capex in oil and gas is going down quite dramatically, which will have an effect for years to come. There's, of course, a risk that momentum on tackling climate change is lost through what's happening but I think we as investors have a responsibility to help keep the momentum up. We've set climate change as our main priority for our stewardship activities this year and we're engaging with a lot of companies. We also saw the delay of COP26 to November next year and maybe that will be a good thing. It was looking quite a struggle before the pandemic to get a good outcome at COP26 because the politics were not in a great place. It could be that this is actually an opportunity to regroup and get a much more successful meeting next year."

MARIE GIERTZ: "There's more focus on social and governance issues right now but I don't think it's a contradiction between the focus on climate change and other issues. I think that the countries and companies that are focusing on social issues and have a strong governance will also want to work on improving climate change. All politicians are now focusing on the short-term economic crisis but I also think that some of the solutions will be investments in more climate-friendly infrastructure, for example."

WENDY CROMWELL: "I don't feel that the pandemic has decreased the emphasis on climate change. I think it actually has accelerated some important trends that were already in place, such as the energy transition away from oil and gas or the fact that we're accepting doing video conferences instead of taking a flight. However, we tend to focus on investing in mitigation but when you start to bring climate together with some of the social issues that have come up with the pandemic, I think we also have to start thinking about investing in adaptation. Climate change is going to disproportionately affect people in emerging markets and we can't expect to move all of the population of India to a different location. We're going to need to help them to adapt to their changing climate."