

TRANSCRIPT | *The Economist* Climate Risk North America panel:

Understanding climate data (event replay)

DANNY RALPH: So hello, and thank you for joining. Welcome to *The Economist* Climate Risk North America event, and to this panel, we're going, where we're going to brainstorm understanding climate data. I'm Danny Ralph, academic director at the Cambridge Center for Risk Studies in the UK. And it's a delight to have three leaders on our panel who actually deal with the response to climate change and sustainability. [00:00:30] We have Amy O'Brien, Nuveen's global head of global investing, excuse me, global head of responsible investing; Wendy Cromwell, vice chair and director, Sustainable Investment at Wellington Management Company, and our final panelist, representing analytics, is Patricia Pena, who is head of product research and innovation at Clarity AI. So welcome to our panelists, thank you very much for supporting this event. I'd like to, before we get into the formalities of data, let's do a little bit of big [00:01:00] picture. And Wendy, I'd just like to hear from you on the relevance of physical climate risk, and is it priced into capital markets?

WENDY CROMWELL: Sure. Well thank you, Danny. Physical climate risk has not been as much of a focus of capital markets as transition risk has. So the study is actually a bit newer. We formed a partnership back in 2018 with Woodwell Climate Research Center to try to bridge the gap between climate science [00:01:30] and finance. We discovered that the scientists don't speak basis points, and the investors don't speak RCP scenarios. And our first evidence that this physical risk was not being priced into capital markets was when we actually looked at the impact of heat, drought, wildfire, hurricanes, floods, access to water issues on municipal bonds, which are inherently place-based securities. They're financing a location, [00:02:00] they're long duration. We found bonds that were similarly priced with very different climate outcomes: the first inclination we had that there was a market inefficiency in this area, and we believe that that continues today.

DANNY RALPH: Very good. Okay. It's an interesting point, and we'll come back to the gap between transition and physical as we, as we go through. And turning to Amy, perhaps could you give a, in response or not, because it may not be physical risk, it may be some other kind of

response, [00:02:30] but could you give a, an example of a concrete action of a climate change initiative by your, by your organization?

AMY O'BRIEN: Sure Danny. I mean climate has been the leading ESG theme across Nuveen's US\$1.2 trillion platform for both the public and the private side. So we have been trying to systematically, meaningfully integrate physical and transition risk factors across our portfolio as part of our ESG integration efforts. We're doing a lot of engaging [00:03:00] with portfolio companies and our operating companies, our tenants, and other stakeholders, such as policymakers, and now we're responding to this increasing client demand tied to new types of products and other value end services as they have new climate objectives for their portfolios. So we're sort of covering the bases on, on this topic, both, both the, you know, on the carbon emissions side, on the physical risk, and the transition risk. On that last point, on physical risk, we are a large real asset owner, [00:03:30] so we're physically owning real estate, farmland, timber, and so this is one area where we've had to focus because it's directly relevant to alternative assets that we manage.

DANNY RALPH: Great. Okay.

WENDY CROMWELL: You know Danny, if I could jump in for a second?

DANNY RALPH: Please.

WENDY CROMWELL: I, you know, I think she makes a great point about it being directly relevant to alternative assets, real assets. We also find it to be directly relevant to marketable securities. So, whether you're thinking [00:04:00] about private investments or public investments, we think physical risk is a consideration that should drive your investment decision making.

DANNY RALPH: So, Patricia, just interested in any comments on the need for your expertise and the gap, or the difference, or the similarity between physical and transition, since we're on this topic.

PATRICIA PINA: So I guess the first thing that I also wanted to emphasize is actually [00:04:30] Clarity AI is a technology company, so what we provide is a platform capabilities for our clients to be able to assess sustainability dimensions of their portfolios, and to do that in an efficient and at scale, at a scale. So we, we integrate our own methodologies and data, but we also have

data and models for third-party providers, and then we provide all those [00:05:00] capabilities to our clients. So all this to say that definitely transition and physical risk are very important pieces. So one of our strategic partners is Blackrock, we are also discussing with them a partnership, they have also climate models, climate offer, how we can complement each other's offers. I guess on that field, we, we mostly for transition, and physical risk, within integrating models [00:05:30] of like, industry and academics, and existing, existing models.

DANNY RALPH: Great. All right, and now we'll, we'll hear more on that. So if I'm, if I sort of now move to the topic of the panel really, so let's start to brainstorm on data, and we'll tackle initially the sources of data, and we'll address what's not in the sources later. So, but we can do a quick roundup and perhaps, Amy first and perhaps [00:06:00] Wendy, if you could tell us what your trusted or favorite sources are for decision-relevant climate data, that would be great.

AMY O'BRIEN: Well I can start there, but I want to preface by saying, you know, we are still working, that's a work in progress that we have access to high-quality decision-relevant climate data. I mean some of these data sets are, are relatively new, and we are, are in the process of working to gather a very wide range of [00:06:30] what's available in the market, you know, covering the topics that we just went through in our opening comments. Also we're finding the need to have to, you know, dig in and create our own data sets, and also I think to the, to the last comment, we're finding that many of our client inbounds on portfolio characteristics are, you know, those needs are evolving very quickly. And so, we're trying to sync all this up. I can't really say I have a favorite, but we have about, you know, seven or eight different data feeds coming in, [00:07:00] we are constantly working with partners to co-create new, new needs. We need better ways to interpret some of this data, to normalize some of this data, so it's pretty significant, you know, effort across the platform right now.

DANNY RALPH: Great. Wendy, would you like to add?

WENDY CROMWELL: Sure! We spent the first half of 2020 really integrating information from various data providers [00:07:30] and from our own internal research into our traditional technology platforms. So we thought it was really important for the portfolio managers to

have decision-useful data, as you mentioned, about the weighted-average carbon intensity, or the science-based target coverage of their portfolios, in their, where they go for their traditional processes, and not sitting outside of that. So, that integration happened in the first half of last year as we were beginning to roll out our [00:08:00] net-zero commitment. In terms of the data providers, we do access data from a variety of different sources, including some of the traditional third-party data sources, but also places like the CDP, the SBT initiative, our own partnership with Woodwell, so nontraditional and traditional data sources. And I think we're going to speak to where we need more data, I think in, in the coming questions.

DANNY RALPH: [00:08:30] Yes, and I'm going to move to Patricia in a moment, but I wanted to just perhaps have the distinction that you've both made between what you might call a data provider, but maybe there's another way, there may be a data collaborator, for example, an organization such as the Investor Responsibility Research Center. So there, there are these various centers which, [00:09:00] they're not necessarily commercial, and -- but they're involved in help, helping organizations actually achieve things. So Amy, you had mentioned that this is a work in progress, and what, what's the dividing line between procuring, if you like, data, and being a co-generator of data, would you say?

AMY O'BRIEN: Yeah, I mean we have to work on, on both, you know, both fronts right now. I mean one thing that all this climate data needs is context, and scenarios against which we [00:09:30] can evaluate whether a company is doing well, or a portfolio is doing well under a specific outcome, like Wendy just mentioned, the net-zero commitment, which our parent organization, TIA, has made. So we are trying to work on, you know, filling gaps with data, and let's, let's -- I'll be the first one to say this, we still don't have mandatory company disclosure requirements, which is one reason why many of us have to put so much effort into, you know, generating and, and creating [00:10:00] but it's really about the context setting, and the interpretation of the information, so that we know whether or not, say, a portfolio is aligned to a net-zero target, and again, this gets into more what we're hearing from clients, institutional

clients in particular, versus things that we used to hear a couple years ago, just what's the footprint of the portfolio?

DANNY RALPH: Okay. So maybe Patricia, you're the, the data scientist in chief here, perhaps [00:10:30] you might be able to help tell us, how do you describe data, does it fall into different blocks? What should we expect from it, if you like?

PATRICIA PINA: Yeah, and I think because we are talking about data, I'm definitely [inaudible] and issues, challenges with data. We were talking about emissions, I think like one important thing, and then also more qualitative data, I think it is important first to distinguish the nature of the data, [00:11:00] quantitative data versus qualitative. And I think qualitative is very important, we recognize it has a role to play, but we also need to understand what that role is. And it is really necessary, and I think where we will -- and we will see already some of the industry moving, but it will happen more and more, is to link those two things. Qualitative data I think is relevant, and will be more relevant, as long as it signals and it is linked to a quantitative, [00:11:30] to a performance metric. So when we were talking about net zero, it's a commitment, but then how credible is the commitment, is that commitment, has predictive power over the future, the, the future emissions of the company? And what do we need in addition to that commitment to make that happen? We talk about transition plans, about capex, so it's starting to connect all those qualitative with quantitative metrics, so that we really understand [00:12:00] where the company is today, and where the company is going to be tomorrow. And I think that links to those forward-looking metrics that we often talk about when we talk about climate, and I think those are critical. Fortunately today, mostly our commitments, targets, I think hopefully as we, we continue to do more work, those will become more, more of a real forecast of where the company will be, [00:12:30] or more like, closer to, to that forecast, or, or that trajectory that the company is likely to, to move or to follow, rather than just a commitment.

DANNY RALPH: All right, and I think you, you've raised some important points, which was maybe implicit in some of the comments of Amy and Wendy. And, and Wendy maybe I can, can ask you this, this quantitative versus qualitative point, so if I asked you, [00:13:00] for

example, you know, what, what's sort of measurable today, or reportable today? And the kind of qualitative versus quantitative split, what, you know, what, what advice would you have, or what would you observe?

WENDY CROMWELL: Sure. Well the first statement I would make is that we shouldn't wait to have perfect data to take action. I think that's our job as investors is to dig into and do fundamental research of companies [00:13:30] in order to make better-informed investment decisions, whether or not the data is omnipresent. However, investors are inherently analytical people, and so we always crave data in order to facilitate that decision making. And right now, there's a dearth of data. So from the MSCI All Country World, I think we have Scope one, Scope two disclosures for 77% of the market cap, that seems okay, but that's only Scope one and Scope two. That accounts for about [00:14:00] 84% of the emissions profile of the index. So those that emit more are overrepresented. But when you turn to Scope three data, for example, which is critical to investment decision making, we only see 18% of companies disclosing their Scope three data. And the rest of that data is estimated based on industry averages. So the real power of capital markets is to discern differentiation amongst [00:14:30] companies within similar sectors, pick winners and losers, funnel the capital to the winners, in order to get that virtuous cycle going. If you're using industry averages, you're not getting that differentiation, and you're really, more than -- more inclined to do wholesale exclusions, or underweights of various industries. So to get that mechanism working better, better data disclosure would be really impactful. I know that Nuveen has been involved in this as well, but the SEC [00:15:00] has -- is working on a rule to propose mandatory climate disclosures for issuers in order to facilitate this, and we've been very active in them, in sharing with them how it would help us make better investment decisions on behalf of our clients, asking for Scope one, Scope two, material Scope three disclosures, also some forward-looking, more qualitative information, and also importantly, physical location data to help with that physical climate risk assessment. It seems like the location [00:15:30] of a company and all of their operations should be omnipresent and easily accessible by investors, and it's just not there yet.

DANNY RALPH: Okay that, that's great. It's also a, a nice bridge to exactly where we need to go, which is what's the data that we'd like to have that we don't have? And you, we, you've mentioned the role of disclosures, and disclosures could be voluntary and as a kind of standards question. They could be mandatory, in which case a regulator [00:16:00] would be setting those reporting standards. Amy maybe you could pick that up. If, if you could, two things, where are the big gaps, and how does one address them? And let's take Wendy's point very seriously, we can't wait, we can't wait for the perfect set of reporting standards and regulations. So what does one do in the meantime?

AMY O'BRIEN: Well I mean, I absolutely agree with that, and you know, investors have to rely on their own conviction, their beliefs that the low-carbon transition is happening, and, and they need to get ahead of that, even in [00:16:30] the imperfect data world. I agree most of, a lot of ESG data is still, not just climate, suffering from a lag effect. And so having more forward-looking data, would, would be extremely helpful. But really just to the point around qualitative/quantitative, we all love numbers in this industry, but what we're finding is it's just critically important for the engagement and the stewardship work that we're doing to, to bring to a company, you know, [00:17:00] what we think their current picture is. You know, based on some of this imperfect data, then to work with them on understanding what their commitments are, and, and using stewardship and engagement to fill those gaps, you know, particularly about what is the company's longer-term plan around, you know, how are they going to address the risks and opportunities associated with, with the transition? And so, that's where, you know, I think those, those two pieces come together. You know, to my earlier comment, the, the gaps are, are still pretty wide, I mean we in, you know, at Nuveen, we're investing in a wide range [00:17:30] of asset classes. And so, there's been a lot of focus in our industry on, you know, public company—companies' listed equity. We're, we're really digging in on a lot of the private companies right now, we have a really significant private fixed income exposure, and then some of the real assets that, that I've talked about already. And so the gaps are there, I think we are seeing, you know, improvements on the regulatory front, I think we're moving towards more mandatory, but we're also, you know, entering a, [00:18:00] a

broader regime of some competing interests by regulators and different approaches, which you know, definitely, you know, create challenges for, for us as a global asset manager.

PATRICIA PINA: Danny, can I jump in?

DANNY RALPH: Please. Please Patricia.

PATRICIA PINA: Sorry, I just wanted to, to follow up on a point, and I agree we need more disclosures and companies need to, to report more data, and we need regulation. But also on the Scope three that was mentioned by Wendy, it is not only that [00:18:30] companies are not disclosing it, but also that often the data that they are disclosing is not, is incomplete, is not the full picture. Actually, we look into the CDP data, like the Scope three data, it's close to CDP, and, and we created two groups. We compare the companies that are disclosing this Scope three data, that is validated, verified by a third party with those that don't have verified data, and actually, there was a difference of almost 50% in the [00:19:00] group that was not verified, underreported. And it was not the mix of industries actually, we look at the effect versus impact across industries. So, that I think, is a signal, a strong signal, that there is also significant underreporting when it comes to a Scope three. So we need reported data, but also we need accurate, reliable, complete reported data, so we need to be careful about that.

DANNY RALPH: Good, thank, thanks Patricia, [00:19:30] that's, that's spot-on. Would it be fair to say that there are two kinds of -- more than two, but at least these two kinds of quality checks? So one is perhaps I can ask you, is verification is, is audit a service that you can buy? And is that trusted?

PATRICIA PINA: Yeah, I think there are different -- and, and we don't provide those services, so - - but I mean there are, there are [00:20:00] different providers of different. I think also it depends on the metric we, we are looking at, and, and whether, how standardized and how well defined it is. I know for example green bonds, they are audited by third parties, but depending on the, on the guidelines, or the rules you are following, and the, and the external validation, there are less or more concerns. So again, those I think definitely are an extra check, and it's an extra balance, [00:20:30] but it depends on the specifics, I don't think they're all the same,

depending on the metric, and depending on the standard, or depending on the, on the company doing it.

DANNY RALPH: Okay. Thanks. And because we're now talking about how organizations use this data to make decisions, the, the other half of that verification coin, if you like, was hinted at by Amy, I think, when you said that you work actually, you know, with organizations [00:21:00] to help them understand their own exposure. And, and is this you give them advice, do you help them mark their homework? Do you give them templates? How does it work?

AMY O'BRIEN: Yeah, I mean in terms of our stewardship and engagement, we are very focused on a particular strategy around transparency, accountability, and, and impact. I mean oftentimes, you know, companies who, you know, I think are doing the right thing when it comes to managing climate feel like they're not getting credit yet by, by their investor base or, or other stakeholders. [00:21:30] And so we are often, you know, and, and in more partnership with them, if you will, and giving them advice on, on what we're seeing as emerging, you know, best practice, and how they're faring, you know, against competitors, frankly, and, and what, what we believe best practice is. And it gets back to I think the point Wendy made about, you know, how this feeds into a fundamental analysis of a company, and how we can have confidence, you know, as long-term investors that, you know, these companies fully understand this risk, [00:22:00] and, and are transitioning accordingly.

DANNY RALPH: And, and Wendy, would you say it's the same, it's a mix of "hard data sources," but also industry knowledge and engagement that gives you that assurance, if you like, in terms of your investment decisions?

WENDY CROMWELL: Sure, I, yeah, I mean I think every investment firm needs to think about their own characteristics and adopt a strategy that, that takes those into account. So at Wellington we're, we're reasonably large, we [00:22:30] manage US\$1.4 trillion in AUM on behalf of clients, assets under management on behalf of clients. We're active, so we're owners by choice, we're making decisions whether we want to own a security or not own a security. And then one of the hallmarks of our firm is that we have very long-tenured industry analysts who are senior and follow an industry over the entirety of their career. These are people who are

very passionate about biopharma, and that's all they want to think about all the time, and so they follow the industry for, for 25-plus years, [00:23:00] they know the ins and outs of it very well, so they're highly credible. And we bring those three characteristics together to say okay, we're, we're large, so we have access, we're active, and folks would rather us own their securities rather than not own their securities, and then we have sophisticated analysts on the other side of the table who can provide credible advice and say we, you know, we think you should be doing this, you're doing that, why? And kind of help companies [00:23:30] overcome the impediments to adoption, or to success, provide best practices that they've observed in other arenas, dig into the practices that they see the company simplifying and explain to them why or why not, why we think that is a good practice, or, or one that's not going to lead to value?

DANNY RALPH: Okay, thanks. Let's, let's move on to another, difficult but, but pressing issue, which is how can data be compared across jurisdictions? [00:24:00] And perhaps Amy, why don't I give you the first shot at this one?

AMY O'BRIEN: Yeah I mean it, it really gets down to, you know, how the use case for the data, comparing it across jurisdictions means that we have some set of information that is consistent, you know, with all the companies, you know, in our, in our coverage universe. But then we have to quickly get to, you know, how are we making decisions on that information? And so what we've found is the need to develop our own [00:24:30] internal methodologies versus sort of rely on third-party ratings. So really leveraging the datasets themselves, I think the point Wendy made about feeding this information into the actual systems that investment teams are using, which is critically important for, for leveraging it correctly, and then figuring out, again, that context, how to interpret, normalize, and, and you know, for example, we've had to take a different approach with how we interpret and use data, say on emerging [00:25:00] market companies versus developed markets, looking at country context of climate. So we have the, you know, the climate performance or the, the low-carbon transition plan for the company versus the country, that it, it's, it's located in. So those are a couple of the things that we have to keep in mind as we, we look to, as a global investor.

DANNY RALPH: And, and if I take a sort of, a second opinion, if you like, from the investor side, from the management side, Wendy [00:25:30] did you want to add or amplify anything there?

WENDY CROMWELL: Well I think you said across jurisdictions, but I, I would say we also see it across cap size too. So there's, we were talking earlier about the availability of data in various indices, that's most pronounced and, and most available in the large-cap indices, and then when you get into emerging markets, or into small-cap companies, you see that they're, they're not as advanced in terms of their [00:26:00] own knowledge of their emissions profile. So we, we try to engage with companies where they are, and bring them along that continuum. And so instead of, you know, going straight to do you have verified science-based targets, with an emerging markets company, for example, we would start with explaining scopes and explaining the need for a disclosure of scopes, and getting them to commit to that, and so we would move from [00:26:30] disclosure, then to targets, and then from targets then to credibility. So it does feel like there's a, a continuum that will allow different parts of the market to advance and, and some to be leaders, and then some to be playing catch-up just based on their own profile. I think we also have to take into account the development backdrop of some of the companies that we're investing in, and perhaps have a developed country-- companies that are housed [00:27:00] within developed countries on a different decarbonization pathway than those who are emanating from emerging markets.

DANNY RALPH: And I think that's, that's great to hear that sort of level of differentiation, and Patricia maybe you could shed some light, because you've already explained to us that you're quite careful about auditing the, the quality, right, let alone the data itself. So the provenance. And this is quite complicated when you're dealing with data across jurisdictions, so how do you approach this as a, [00:27:30] from the point of view of a data consumer, you want to turn this into information?

PATRICIA PINA: Yeah. And, and definitely, I mean, as Wendy and Amy were mentioning, the data availability is going to be very different and very-- in different geographies, and, and market sizes. So, also, because our approach is to leverage technology, and, and data science, and big data as much as we can. So for example, for, for geographies or for companies that are

not disclosing, [00:28:00] are still at the beginning of the journey, we will use the data we have, we create destination models based on machine learning, based on -- so it's not the industry average, but actually those are models with many different features that learn, and for -- from reported data, similar companies, and we will train the model, and we will also have a whole data set, so like reported data that we set apart, validate the model, [00:28:30] and if the model is not performing well, then we will not actually use it, we will not put it in production. So, and we will disclose it. I guess all this to say that we also encounter those, those challenges, we leverage technology as much as we can to fill in the, the gaps with the information we have, what we have learned. And then, the other piece is we make that super transparent to our clients, transparency I think is very important. [00:29:00] To be able to tell them this data point actually is reported versus it is estimated, and we in addition have the confidence level of that estimate that we are getting from the model based on the validation. So I think, as we were saying at the beginning, we cannot, like not having the data should not be an excuse for not doing anything. But then we, we need to do the best we can with what we have, but then always being --

DANNY RALPH: Yes.

PATRICIA PINA: -- very clear and transparent about [00:29:30] what we are using.

DANNY RALPH: Okay, and I think, I think we've got that message almost from the beginning, but you said it very nicely, not having the data is not, it's not an excuse, but we have to do something still reasonable. So maybe --

WENDY CROMWELL: Danny, can I mention one --

DANNY RALPH: Please.

WENDY CROMWELL: Can I mention one thing on just, just on this point? This is why if, if you can, having multiple data sources for some of the, the data field can be incredibly useful. And so we've done a comparison across [00:30:00] our data providers on some of the simple estimations, and everyone has a different estimation model. But understanding the strengths and weaknesses of the estimation model can help you triangulate on something that you think is closest to the truth in your research process, and trying to understand a company. And

hopefully, one day we'll have actual data from the companies themselves and the estimations won't be as necessary.

DANNY RALPH: Okay, and I think this is a good moment, we've been [00:30:30] here for about 30 minutes, we've got about another 10 minutes. I, I wanted to just take a pause a bit, because we might shift gears slightly. Let's -- we've talked about, you know, different types of data, we've talked about where it comes from, we've talked about quality. We've, we've got an idea of why we need it, of course. And I'd, I'd just like to give our, our two financial services, you know, or let's call it the investment community, Amy and Wendy, [00:31:00] have a chance to, to ask Patricia questions or, or even offer requests. So what do you want from the analytics community, Amy and Wendy? And I'm not sure who'd like to go first.

WENDY CROMWELL: I, I mean I'm happy --

AMY O'BRIEN: I'll --

WENDY CROMWELL: -- to go first, and Patricia probably already knows what I'm, what I'm going to say, which is, you know, the pace of, of change from the European [00:31:30] community in particular is very high. And all of us are eagerly anticipating some decisions on the European taxonomy, for example, and so helping us keep apace of those decisions, and get that data embedded into our own systems as it becomes available is one request. And just curious how Patricia is dealing with the uncertainty today.

PATRICIA PINA: Yeah, I mean that's a great question, [00:32:00] Wendy. So things are changing and will continue to change very quickly. And more to come, more the European taxonomy, more objectives, more social taxonomies, many more things to come. So I think like one, first we, we monitor very closely, and then second, going back to our approach, because we leverage technology, so we built the, the -- our products in a way that hopefully are modular and scalable, [00:32:30] and we can adjust them as we go. So there was kind of like, a delegated [inaudible] that changed the, the list of activities, so we were able in the taxonomy to introduce that updated list, it's already like in production that one, so now we have gas and nuclear, we don't know what's going to happen, well now they have the -- they, they are going to be included, so because again, we have that data, we are linking it with our database and our

product, [00:33:00] it becomes a little bit easier to, to -- or like the, the implementation cycle becomes a little bit quicker. But there is no silver bullet, so like closer regulation as much as possible, anticipate, and then, and then implement as quick as possible, and make it -- and design systems in a way that they can be adjustable and flexible enough so that we, we can make that happen [00:33:30] with like, with a quick turnaround.

DANNY RALPH: Very good. And, and Amy, what, what's, what's your, score or query?

AMY O'BRIEN: Yeah I, I love the, you know, I'd love to certainly know more crystal ball around the, the future of, of what's happening in Europe, and SFDR and, and the kinds of things. But really, I mean Patricia, what, what do you see as, as sort of the balance between, you know, the demand for data that's around, more around the inputs versus the outputs? Because you know, I'm seeing in our [00:34:00] own case a lot of client demand on very different types of portfolio reporting, which of course has a relationship to the security level. So I mean how are you seeing those two needs evolve, and are they going the right direction, or is there a need to be some intermediation of, of how, you know, the internal and external use of this data is unfolding across the industry?

PATRICIA PINA: Yeah, I think like one, one thing that we always try to, to understand, like the conversation, we always try to start the conversation with the [00:34:30] use case. Like if we don't understand how the data is going to be used, what decisions, and we were talking at the beginning, data for decision making, like unless we understand that, it's really hard to provide the right balance. I mean, we need to start by that. I think unfortunately, it's still, there is a big regulatory driver in the industry for I guess like reporting, and regulatory reporting is [00:35:00] often the main need. And often, and unfortunately, a check-the-box exercise, so hopefully, that will, that will not be, or like we will see less and less of that, but it's still, it's still the case. So I think definitely it start with, with what do you need the data for? And based on that, adjust what you need. And I, I have [00:35:30] clients telling me, like I start with portfolio level, like I -- because I need to report like, security level, I don't know what to do with it, it's too early for me, so if it's true that often like that higher-level portfolio-level reporting is what many clients start with.

DANNY RALPH: So, I'm going to try to bring this to a close. There are several topics I wanted to bring up, but it's been so fascinating that I've held back. So the one that I think, [00:36:00] that I think we kind of need to address, it broadens, let's move a little bit beyond climate data to asking about sustainability. We might think about sustainability goals, that may be ESG. And so there are two themes, but I invite you to, to pick one and, and make a statement, this can be your valedictory statement. So the, there's a potential, there are two sort of difficulties that we wrestle with, those of us who deal with this, and, and you're in the room. One is a [00:36:30] sort of a potential for a clash, you know, what are the trade-offs you need to make between paying attention to carbon dioxide emissions and sustainability or the secular economy, or good governance, okay? Or, or, or treating your communities fairly? And, and the other is something which is, goes directly into the data question. So a continuing refrain is that, if I paraphrase it loosely from a fund manager, [00:37:00] I have three different sets of ESG data, and the correlation is 0.3, which is to say I'm not learning about the organizations from their ESG ratings. Now, that was a couple of years ago, I'm, I'm choosing a deliberately inflammatory statement, but I'd be well-- I think it would be useful for us to tie this data discussion on climate. How do we manage other things that are also difficult? Is there a clash or not? And/or [00:37:30] do we have sufficient quality of data in the ESG space? Now we can do this in any order, but why don't I invite, invite the, Amy first, and Patricia second, and Wendy third.

AMY O'BRIEN: Well those are some big questions, Danny, but I'll try, I'll try.

DANNY RALPH: Just choose, choose a point and we'll, we'll run.

AMY O'BRIEN: So I think it's on, on the E, you know, ESG, I mean we, we are dealing with two, two, [00:38:00] I think two different big-use cases of ESG data: the investors who are, are looking at it just to be better investors, and then those, you know, who are looking for very specific ESG outcomes on their portfolios. I think net-zero carbon, it provides the perfect testing ground for, you know, how those are going to come together, how, you know, we are going to, to look at potential trade-offs or just the way we think about the potential conflict. I know at, you know, [00:38:30] at our, our company, we are having conversations not just about data and,

and outcomes at the, with the analysts. I mean this is a board-level conversation right now, it's a conversation with our risk-management organization. And so, I mean the simple point is, I don't think an ESG rating necessarily tells you about the long-term trajectory of, of the sustainability of a company, and it doesn't necessarily tell you about the specific outcomes that we're increasingly seeing our, our, our clients overlay to their portfolios. [00:39:00]

DANNY RALPH: Okay no, that's very, very crystal. But, but thanks, also not without hope. Patricia what would you say on, on either of those topics, the clash or the quality of the information in ESG data?

PATRICIA PINA: So I want to comment very quickly on the ESG ratings, and this idea of like, the, the, the statement you, you make a correlation, and there is no correlation. The fact that you have three numbers, that they are called ESG ratings, doesn't mean that they measure the same, and they mean the same. [00:39:30] So I think it's like, super important that you understand the data you are getting, what the data is measuring, and, and then have transparency on how it has been built. Because ESG scores, they might be, they have the same name, often, but they are not the same, they measure different things, and they are calculating, calculated in different ways. So I guess like all this just to say that you do need to scratch beyond the surface to really understand what you are getting, and use it [00:40:00] so that you can use it effectively, and, and for, for good decision making.

DANNY RALPH: Great. And, and Wendy, last word from you, please.

WENDY CROMWELL: Sure Danny. I, I didn't find your statement on ESG ratings inflammatory at all and that's because I think we should think about ESG as a research discipline, not as a rating service. And the, the mindset that I think that some have about ESG ratings is that they're going to give them the answer or that the different [00:40:30] ratings providers are going to converge. And what I would say, if you shift your mindset, you think of ESG ratings providers as being more like the sell side, would you expect, I don't know, Goldman Sachs and Credit Suisse to have the exact same earnings estimate for a stock? No! Does that mean that Goldman Sachs and Citi don't do good research, or Credit Suisse don't do good research, and you can't use that information to your advantage to make better investment decisions that are

aligned with your investment [00:41:00] philosophy and process? No! These are inputs that can be useful to help you assess companies, but they're not going to give you the answer. So I don't actually think that the quality of the data is bad, I think the way that people try to use the ratings is probably not in concert with the intent. But that said--

DANNY RALPH: Yeah.

WENDY CROMWELL: -- there's a lot, there's a growing body of research out there, there are gaps to be filled, that means that there are [00:41:30] inefficiencies in this area to be explored, and good research can help you to explore them, and can help you to add value, and can help you to move your companies along many of these dimensions.

DANNY RALPH: All right. Well thank you very much to Amy O'Brien from Nuveen, to Wendy Cromwell from Wellington Management, and to Patricia Pina from Clarity AI.

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