THE BROOKINGS INSTITUTION

WEBINAR

CLIMATE CHANGE AND FINANCIAL MARKET REGULATIONS: INSIGHTS FROM BLACKROCK CEO LARRY FINK AND FORMER SEC CHAIR MARY SCHAPIRO

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Keynote Address and Discussion:

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P R O C E E D I N G S

MS. AARONSON: Good afternoon, everyone. And welcome, at least virtually, to Brookings. My name is Stephanie Aaronson, and I'm the vice president and director of the Economic Studies program here at Brookings. And I am very pleased that you have chosen to join us for this important event.

We're here today to discuss the use of financial market regulation to address climate change. And we're honored to have with us, two people, who are particular well-equipped to provide their insights on the topic.

Larry Fink, the CEO of BlackRock, and Mary Schapiro, former chair of the SEC. With the more frequent incidents of superstorms, longer wildfire seasons, and the ongoing decline in sea ice, it's increasingly impossible to ignore the impact that climate change is having on our planet.

While governments around the world have a number of levers to push to reduce carbon emission, efforts so far have been insufficient, particularly, in the United States. And we are still far from making the changes required to stabilize the earth's temperature at two degrees centigrade above preindustrial levels, the upper limits set by the Paris Climate Agreement.

This has led to two related developments: first, investors are increasingly recognizing climate change as a risk to many firms' business models and they are pressing firms to recognize, analyze, and disclose climate risks; second, regulators are increasingly looking into the use of financial market regulation as a mechanism for addressing climate change.

Today's event seeks to explore the current market forces driving climate risks disclosure, on the one hand, and the regulatory tends on the other hand, as well as their potential complementarity in addressing climate change. We hope this discussion will serve to push forward the conversation on these critical issues.

I am now going to turn the proceedings over to Sanjay Patnaik, who will be moderating the conversation. Sanjay is the director of the Center on Regulation and Markets at Brookings and a fellow in the Economic Studies program. He is an expert on climate policy, particularly, carbon pricing with an interest in how these policies affect firm behavior.

So, Sanjay, I'm happy to turn it over to you.

MR. PATNAIK: Thank you very much, Stephanie. Good afternoon, and thank you very

much for tuning in to our event. In our center here at Brookings, we have made climate change one of our main focal areas. As part of our efforts, we study a wide range of topics including, carbon pricing, the transition to a low carbon economy, and climate risks.

It is a real pleasure to welcome our two distinguished speakers today, who will share their deep expertise and experience in the area of climate risk management. First, I would like to introduce Mr. Larry Fink, who is the founder, chairman and CEO of BlackRock.

He, and seven partners, founded BlackRock in 1988. Under his leadership, the firm has grown into a global leader in investment and technology solutions. BlackRock's mission is to help investors build better financial futures. And the firm is trusted to manage more money than any other investment company in the world.

Mr. Fink has been named one of the world's greatest leaders by Fortune, and Baron's has named him one of the world's best CEOs for 14 consecutive years. Thank you very much for joining us here today, Mr. Fink.

I would also like to note that BlackRock provides generous support to Brookings which helps make the work we do possible. I would like to reiterate Brookings' commitment to independence and underscore that the views expressed today are only those of the speaker.

Second, I would like to introduce our other distinguished speaker: Mary Schapiro served as the 29th chair of the Securities and Exchange Commission; she is currently the vice chair of Global Public Policy and special advisor to the founder and chairman at Bloomberg.

Ms. Schapiro has had a distinguished career as financial services regulator under four U.S. presidents from both political parties. She was the first woman to serve as SEC Chair, and the only person to have served as the chair on both the SEC and the CFTC. Thank you very much for joining us here today, Ms. Schapiro.

For our audience, our event will be structured along four different parts. We will first talk about the market side in the conversation with Mr. Fink; then we would talk about the regulatory side in a conversation with Ms. Schapiro; then we will have a joint discussion; and then, at the end, we will have time for public Q&A.

So if you would like to ask a question, please email them to events@brookings.edu, or

tweet about them using the #ClimateRegulation. With this, I would like to turn to you, Mr. Fink.

BlackRock really has made waves by announcing its intention to focus on climate risks for its investments. In your letter last year to shareholders, you mentioned to you expect the fundamental reshaping of finance to take place in the future.

This year you have doubled down even more on the climate risk angle, and you stated that BlackRock will apply a heightened scrutiny model for climate risks in its investments.

Within that context, I'm curious, can you please describe BlackRock's approach to (inaudible) a good risk for its investments, and also tell us a little bit about what you mean when you say that we expect the a fundamental reshaping of finance in the future?

MR. FINK: Well, thank you, Sanjay. It's nice to be here today. It's always nice to be with Mary. So when we founded BlackRock a little less than 32 years ago, the whole foundation of our existence was on the foundation of risk management.

And throughout our 32 years, we have started to include more different types of risks. And it was very clear to me, even with the regulations of the United States, especially, with the DOL changes of this past -- from the past administration -- that climate risk is becoming a substantial investment risk.

And what we are seeing more and more evidence of how climate risk is now impacting how we invest. Whether it is climate change, or whether it's transition risks, these are two major issues that has to be analyzed. And there lies some of the difficulties because we were lacking data and analytics over time.

And but, today, going forward, we are developing better analytics, better data, and most importantly, better reporting. And from the good works of SASB and TCFD, we are beginning the foundations of better reporting at the corporate level.

And through that reporting, through that transparency, we have better abilities to judge behaviors of companies and then overlay our views of climate change whether it's a physical impact on a location through satellite imaging and/or how we have now been able to create new models to try to look at how climate risk is impacting geographic regions or locations.

We are applying now and having conversations with reinsurance companies, who, as

their livelihood, they have to now, on a yearly basis, to reassert what type of risks are there as they reinsure different risks.

And all of that is coming to a head now, where I believe now whether it is from regulation or from environmental groups, we are now beginning to see changings of behaviors from investors.

When I write my letters, I don't think I write anything that's that unique. What I try to do is translate what we are hearing from investors, investors in the United States, investors throughout the world.

It is also from conversations we are having from regulators and government officials worldwide on how is this moving. And I truly believe we are now at this point now where now all of the fine work of the NGOs, all of the work that is being done throughout the world related to the issues around climate risks and what that will mean now.

Finance is now opening up to the idea and looking at that. Now we are becoming able now to judge companies more successfully to understand how, whether it's transition risks, or true physical climate risk itself, is how that is impacting the forward valuations of companies.

And what's the beauty of finance is, when finance recognizes a problem, and that problem may be in 30 years, but we bring that problem forward and we present value that costs. And because this is such a large endeavor that's going require trillions and trillions of dollars to get to the objective of two degrees, it requires an effort that is immediate, but it requires a consistent effort.

And the last thing I would want to say loudly, when I write my letters and where BlackRock can play a role in finance, we can really only play that role with public companies.

If we are truly as a society wanting to change the shape of the curve, it has to be a societal point. It can't just be done on the heels of capital markets, on the hills of public companies.

If we just judge public companies but don't ask municipalities and cities, if we don't ask private companies and all citizens are doing it, we are not going to achieve the objectives of the Paris Accord.

And so what we are trying to do at BlackRock is raise the profile, raise what we are going to do, in terms of how we are going to analyze every company, but we're going to be doing that, you know, principally with just the public companies.

And so, hopefully, through my letters, in my 2021 letter that was published last week, it was about not just what we are going to do at BlackRock. It is also a cry out for governments, for public policy to shape this agenda. Because we are not going to be successful if just the capital markets and finance are going to do the job.

MR. PATNAIK: Okay. This is a very interesting point, the last one. I want to pick up on that a little bit. So when you look at regulatory action, right, and the interplay with markets, what do you think, what role can market participants play in pushing forward and informing regulatory action?

I think that's something that is probably quite (inaudible) and relevant in the U.S., but also worldwide, like we have seen in the U.N. and other countries.

MR. FINK: Well, there is a 127 countries that are analyzing to go ahead or move forward on a net carbon zero agenda. So, let's be clear, we are witnessing a revolution in governmental attitude. Even countries like Japan with a new prime minister who is changing this.

We have had many dialogues in China about green finance and where they are going to take it, and how they're going to move their society. We actually have, you know, in the last four years, we have had less of a conversation here in the United States -- and conversations that BlackRock is having.

And let's be clear right now. And so you asked me the question about regulatory issues. But let me just -- let me just get back to one point which to me I have to articulate. And that is we are going to see regulatory changes and we're going to see big changes I think globally.

I think that's going to be -- I can say that with certainty. The first thing I would like to say is, I hope capitalism does it for government not because of government. And that's one of my big outcries to it.

I did say in my letter that I'm very optimistic on capitalism and our role. And so I hope that we are all recognizing that we're making, we're changing the shape of the curve. But I'm only doing it for public companies. I can't do it for the whole society.

And, as I said, through the foundation of what TCFD and SASB are doing, and using that as a metrics for analytics, and through that transparency we're going to see public companies moving very, very rapidly.

But let me get to my big issue. And this is going to really sum up the problem we have in the world today. If regulation is only going to be for public companies, we are going to see a huge arbitrage and that arbitrage is existing right now with so many of the renewable energy companies trading at 26, 27 PEs.

And that's a redistribution of capital you see. It's trading so high because there is so much money racing for these few developments. And the hydrocarbon companies are trading under 10 PE; some of them are trading at six and seven today.

They are trading at a point now where many of these companies may just go private. Okay. If they go private, and if society doesn't look at it holistically, we are not going to solve the problem.

What we are witnessing in Europe, many of the European energy companies are looking fantastic because they're selling the dirtiest of their businesses. But they're selling it to private companies, private companies in southeast Asia.

So the world is not better, the world may be worse because nobody is focusing on those private companies. So that public company looks really good. They look better than they did a year ago, by all of the TCFD metrics. But the world has not benefitted at all.

And I'm heightening that because if we are really -- if we really want to make a change, if places like Brookings really wants to move the dial, it can't just rest on what TCFD or SASB or what BlackRock and the capital markets are doing. It has to be organizing holistically.

So, right now, if we continue with the path, I think we're going to see a lot of change in public companies. I think we're going to see remarkable change and which I'm really optimistic on.

Getting back to your regulation question, it has to be holistic and it has to be consistent. And if we don't have that, Sanjay, we're not going to accomplish what we want. We're going to see all of these hydrocarbon companies go private, and we're going to create new classes of billionaires.

Because, you know, we are going to have hydrocarbons for 50 years. Let's be clear. We are going to be substituting renewables and other things, but we don't have the technology.

And Bill Gates talks about this a lot, about all of the technological changes we need to really get to a net zero, zero carbon world. It requires, you know, as up to $50 trillion of investing to get to that objective.

And we're not going to be able to do that unless we have public policy that's unified by all governments but is consistent. The question should be raised, should we allow companies to sell to private companies, if that's what we're trying to do in changing that?

Right now there is, obviously, there is no conversation about that. And I'm not against doing that, but it doesn't achieve what the world objective is. That public company looks better and I may be happy as a public shareholder of that company and where it's going.

So there lies the beauty of capital markets and through now the pressure that companies are being applied related to transparency, through TCFD, and SADB, and other reporting mechanisms, we're going to see a vast change in the public company arenas worldwide. They are going to move forward.

We are not going to need really governmental change or regulatory change. I think it's happening. I think more and more CEOs and Boards recognize that. The real question is if we're going to do this holistically.

If the ambition is truly to change the shape of the curve, it can't be grandstanding by just talking about public companies. It can't be grandstanding about just focusing on the few companies.

And so this is where regulatory change has to exist; it has to be holistic. And then we have seen it, but not just holistically, it has to be holistically globally because we can't allow the arbitrage between one country and another country in terms of how they are moving forward in this.

If we don't do this uniformly, we're not going to achieve anything and we're going to -- you know, and the one thing I did say in my letter that I want to pound my fists loudly, any transition has to be just. If we don't have a just transition, you know, we know politically it's not going to happen.

And so in any transition, we're going to have to focus on job creations as fast as job loss. And I don't hear that conversation as much as we should be hearing.

MR. PATNAIK: This is actually a really interesting part, especially, the arbitrage point between public and private companies. Because I don't think this is in the public sphere much, and it's not being discussed really. So that's very interesting.

And I think my next question ties in a little bit to this. You made an earlier point on how important reporting a disclosure is. And I think what we are seeing now is we see a lot of different

disclosure, standards, private, public.

And so I'm curious when you look at it from BlackRock's perspective, what kind of steps have you taken to enhance corporate climate disclosure and really focus on kind of like that information that is valuable, that can help you assess where the firm is climate friendly or not?

MR. FINK: As an investor, with every public company, we have a voice, we want to use our voice properly. We have been loud over the last few years of asking companies to move rapidly towards disclosure through reporting under SASB and TCFD.

Last year, when I asked companies to do that -- Mary would know this much more intimately than I do. I believe there was close to a 400% increase in SASB reporting's. That's not fast enough, by the way. She will certainly be able to tell you how fast TCFD reporting and filings are.

But to that public disclosure, we're going to be able to understand how a company is moving forward. Once again, this is for public companies. And so I am absolutely certain in the next three, four years, most companies are going to do some form of reporting.

We are witnessing this in every conversation we're having whether investment stewardship team, talking to leaders of companies and their boards, more and more companies are focusing on this or looking to do it.

The problem we have, we do not have a global standard yet, and there is great amount of confusion. The faster we can move to a standard that is acceptable with Europeans and Asians and North American, you know, the faster we can move this forward.

You know, I mean, what people don't know, our accounting standards in the U.S. are quite different than the accounting standards for just regular accounting standards for Europeans. We have two different methods of accounting. And I'm sure Mary, when she was running the SEC, had to deal with that all of the time.

But so if we are really going to tackle this, if we want to have 100% participation, the easiest way you could do that is having unified standards. And if we are all going to come together, if we really, truly believe in the Paris Accord, if we're all being unified, please let us also work towards a unification of standards.

Now once we have that unification of standards and companies reporting it, you can't

hide as a public company. Now the beauty is you can hide as a private company. Okay? It gets back to this arbitrage. And that arbitrage is grossly unfair if we think the standard should only apply to public companies. We're going to see more and more public companies going private if we don't solve the problem. And that's where government and government policy has to have an opinion.

MR. PATNAIK: So that's kind of like good work as a complementary force to the market forces that maybe are focusing on public companies, right, right now?

MR. FINK: But Sanjay, market forces are wonderful. That's the beauty of capital markets. It identifies a problem. Once we identify a problem, it's a price bid. And once we identify a company that company's valuation is priced in.

Let me just tell you one other fact that we have witnessed in 2020. Companies that are more focused on stakeholder capitalism, companies that ae more focused on -- and more forward-thinking related to reporting under SASB and TCFD, in most industries those companies are more forward focused already; their PEs are higher than their peers.

You are seeing a valuation change. That is part of this reallocation of capital that I have been talking about. We are witnessing it now through PEs in companies and industry which is encouraging the companies not reporting to rapidly get on with it and start reporting.

So the capital markets is creating this process and change which is wonderful. That's why I love capital markets. I think capital markets, as the engine of economic growth, has really created all of this transparency. And through that transparency now all of the academics can analyze public companies.

But if I had a plea to all of the academics, can you please focus on all of society not just the public companies? Because we're not going to get there yet without having all of society buying into this.

MR. PATNAIK: That is actually very, very interesting. And I appreciate the (inaudible) to focus on private companies. I think that's something for us at Brookings to think about and work on going forward.

MR. FINK: But you can't get the data that there lies the problem.

MR. PATNAIK: Right.

MR. FINK: But if a policy worked for public companies, it better work for private, too, or we're not going to get -- if the objective is really the target of the Paris Accord, and the only way we can get there if all of society is buying into it.

MR. PATNAIK: I totally agree, and especially on the global aspect. I think we need to come to a global agreement, at least on the disclosure standard.

Wonderful. So now I would like to move to Ms. Schapiro because we're talking about the regulatory side. Right? So, Ms. Schapiro, can you describe a little bit your climate work at Bloomberg?

So I think Mr. Fink has laid out really some very interesting points, and now we're trying to look at it. In your experience as an SEC chair, and looking at it through the lens of a financial market regulator.

MS. SCHAPIRO: Sure, I'm happy to, and thank you for the opportunity to be here. And I want to really thank Larry for his leadership on climate risk issues. He has really helped the world to understand that climate risks is financial risk and needs to be accounted for in economic decision-making. And his stewardship letter every year really is a highlight for those of us who toil away on this issues all of the time.

So I should disclose I am vice chairman of SASB, in addition to the work I do at Bloomberg. But at Bloomberg, I basically lead two climate-related initiatives. The first is the Climate Finance Leadership Initiative, which was created by the U.N. Secretary General, a couple of years ago, as a private sector initiative to really support a global mobilization of private finance in response to climate change.

Mike Bloomberg convened seven major institutions to look at what the challenges were and what the solutions are for financing a low carbon future, particularly, in emerging economies. And last year we produced a report that examines the structural and other challenges that are out there, that are holding private finance back from responding to the climate crisis.

And then we proposed a number of solutions that could be undertaken to those challenges by private finance, public finance, and public policy. And now that work has turned towards creating pilot projects in emerging economies, in effect, taking words and moving them into action.

The other initiatives I think is probably much more on point for what we are talking about

today is leading the task force on climate-related financial disclosure, or the TCFD, as Larry has said. And it's a private sector task force that was created in 2016 by the Financial Stability Board, which is the Central Bank governors and finance ministers of the G20.

And the goal was to develop a voluntary framework for companies and financial institutions to disclose their climate-related risks and opportunities, again, to better inform economic decision-making by lenders, insurers and, most particularly, investors, of course.

The framework was published in June of 2017. It rests on four pillars: governance, risk management, strategy and metrics and targets; so a very familiar format for publicly reporting companies, as Larry has pointed out to report, but with respect to climate risks and opportunity.

And the goal of the framework was really to generate decision useful, forward-looking information about how climate change impacts a companies in financial terms including by using scenario analysis, for example, to determine how resilient the business's strategy is to different climate scenarios including a two degree scenario, as was agreed under the Paris Agreement.

At this point, the framework has been actually endorsed by 1800 organizations including companies that have a market cap of about $16 trillion, and financial institutions with assets of $160 trillion; 10 national governments have endorsed it; and four have announced that they will make TCFD aligned reporting mandatory across their economies.

So it had tremendous pickup because it's a principles-based, scalable, usable, familiar approach to disclosure but one which we think really helps to inform the capital markets about climate risks and in that sense enlists the capital markets in the battle against climate change.

MR. PATNAIK: Great. This is very interesting. And so we have talked a lot about the climate risks, right? And your work is really focused on this.

So my question is, like, in your opinion, what do you think are the key financial and economic risks tied to climate change, and who is most vulnerable to these risks? Is it companies? Is it governments? Is it a certain type of company?

So I think it's quite an interesting question to see kind of, like, how we can prepare for these risks.

MS. SCHAPIRO: Well, all of the above: governments are affected; municipalities and

local and state governments are affected; companies of all sizes are affected in every sector. In fact, SASB research tells us that I believe it's 73 out of 77 industries are materially impacted by climate change. So it's a non-diversifiable risk in that sense, which is why we absolutely must understand it.

There are two primary categories of risk related to climate.. The first is physical risk, the one which we think about, that Anna spoke of, several weather, fires, floods. Those are the acute physical risks. And then there are chronic physical risks, like, water shortages or persistent heat.

And so let me give you a couple of examples how these actually create financial impact. For an issuer or a public company the risks can interrupt operations. They can damage physical assets of course, like, plants or buildings. They can interrupt the supply chain.

And all of that in turn can limit the company's ability to service their debt or to access capital. And that can in fact damage their lenders, underwritings, or insurers. And, interestingly, when the TCFD was created a lot of focus was on physical risks.

I'll come to transitioners in a moment. But part of the endeavor was to understand what the impact potentially of climate risk was on financial stability and the financial system. And you can see how these risks can reverberate through the system to impact financial institutions. And the U.S. government is obviously quite focused on that now in a number of agencies.

The other big category of risks is transition risk. And that really includes change in market preferences, technology deployment and development and policy drivers so that when we see customers demanding more low carbon alternatives the demand for carbon-intensive products will decline. And, as a result, the assets and investments made in those high carbon, high emitting assets could be stranded or certainly devalued.

And increasingly with government commitment to net zero and the polities that will support that, that's going to further reduce the demand for high carbon assets and put real pressure on them.

So, for example, when General Motors announced on Friday they would only produce zero emission cars that that's going to put tremendous pressure on the entire auto sector to follow suit; and that will mean that plants will have to be refitted, a whole range of activity will have to be undertaken.

But, as I said, these threats and these risks are not theoretical. The SASB data tells us

the 72 out of 77 are materially impacted by climate change. And Moody cites ESG risks as material considerations in 33% of their ratings actions published in 2019. So it's a meaningful impact and it's a genuine financial impact.

MR. PATNAIK: And I think that later point is actually really interesting. And we're doing some work at Brookings looking at the exact impact of climate risks. And I think a lot of people had expected this to happen must later, but we already see the impact of these risks materializing. So that is very interesting.

MS. SCHAPIRO: That's absolutely right. For a long time industry companies would say, if it's not big and it's not now, I am not worried about it. It's not material to me. And, of course, what we have seen is really a wholesale change in that perspective, literally, within the last four to five years.

MR. PATNAIK: That's very interesting. And so now moving a bit to the regulatory side, right, if you look at the United States which agencies do you think should have the regulatory authority in the U.S. to oversee climate-related financial and economic risks?

MS. SCHAPIRO: So, look, a lot of agencies with the U.S. government I think have really important responsibilities here, which is why this administration's whole government approach is so logical.

You know, obviously, the SEC has responsibility for disclosure by public companies of material risks generally and that includes climate risks. The Federal Reserve Board has recently identified climate change as a near-term risk to financial stability.

And even now it's a creation of the Supervision Climate Committee that will pull together senior fed employees from across the system to try to really build the feds capacity to understand the implications of climate change for financial institutions.

I think the feds are very much at the exploration stage, but they're moving quickly now. And if you look abroad, you will see that central banks are engaged in a lot of exploration around the impact of climate change.

They're doing climate stress testing and scenario analysis they're doing research; they're incorporating considerations of climate risks in macroprudential supervision and financial stability; they're scaling green finance. So the financial regulators abroad are moving quite rapidly.

Secretary Yellen has announced that she'll create a climate hub within Treasury and they're going to focus on risks to the financial system, as well as related tax policy. And she chairs the Financial Stability Oversight Council, which brings together all of the financial regulators in the U.S. at the federal level to identify risks to the financial system. That's another mechanism she will have to consider climate risks.

The CFTC, which regulates the derivatives markets, which I chaired many years ago, has issued a report in September that's really a superb roadmap for financial regulators to managing climate risks in the financial system.

And that talks about the necessity for the CFTC to gain an understanding of how climate risks can impact markets it regulates. And it you think about the energy markets, the agricultural markets, the freight markets, it can have, climate change can have very profound impacts.

Department of Labor has a role to play here. They need to make it clear that under a recent consideration of climate-related factors in investment decisions is consistent with fiduciary duty, not inconsistent, which is what the last administration has said.

And even the Department of Defense has come out in the last couple of weeks and declared climate change and national security issues. So, you know, it truly is a cross-government effort to look at these issues.

But, not surprisingly, from my background, I think the SEC has real power here derived from its ability to make sure the capital markets and economic decision-making is fully informed about risks, at least to Larry's point, with respect to public companies. But there is work that we can do with private companies as well.

MR. PATNAIK: So this is a great segway to the next question which is: When you were the SEC chair, right, how did your team think about the role of financial market regulators in addressing climate change?

MS. SCHAPIRO: Well, you know, when I arrived at the SEC in January of 2009, I can't honestly say that climate change was front of mind. It was we were still deep in the financial crisis; there was a lot going on. But I will say that, even at the time, large institutional investors had already been making the point to the SEC pretty effectively that they saw climate risks as financial risk, and they really

needed better disclosure to evaluate the risks and inform their capital allocation decision.

So in early 2010, a year after I had come onboard, we actually published an interpretative release that would provide guidance to public companies regarding how existing SEC disclosure requirements apply to climate change.

And we thought about it very much in the traditional -- under the traditional construct of the federal securities laws which is, what information would be material to investors in making an investment decision?

And we focused on four areas: What could be the impact of legislation and regulation regarding climate change on the company; what's the impact on the business from treaties and international accords -- Kyoto, at the time, Paris, obviously, today; what business trends could create new risks and opportunities including scientific or technology developments; and, finally, what were the impacts of physical climate change on the company and its operations.

And so if we thought about in 2010 that it was important to have that disclosure, it is magnitudes more important today.

MR. PATNAIK: It is, yeah, definitely, especially with the urgency of climate change already materializing. Right?

And so the last question I think is on the mind of many is, if you look at the SEC today, what do you think the SEC can do going forward to really move the needle enforcing firms to reduce the exposure to climate risks and to decrease greenhouse gras emissions if there is a role for the SEC in that as well?

MS. SCHAPIRO: So we have to remember that the SEC is a disclosure agency. And that's the primary it will interact with the issue of climate change. It's not their role to tell companies to reduce greenhouse gas emissions, or how to run their businesses.

That can be the role of legislators if they choose to set emission standards and targets, role of the administration to set targets, if that's what they choose to do. And indirectly it will be the role of the markets so long as they are informed about the costs of climate risks.

But the SEC's focus will always be disclosure. And even the bank regulators are better positioned to put substantive limitations on the activities of the banks they supervise if they think that's

necessary for systemic stability.

But the SEC has some pretty powerful tools if it chooses to use them. It can, of course, write disclosure standards that would improve the quality and the comparability of information in the marketplace. If we do that, if they do that, and I think they should, I would hope they would do it arm-in-arm with European and other regulators so that we have a global standard for a global problem.

They can also comment directly to issuers on the filings and climate disclosure that's already being made about whether it's complete enough or informative enough. And that kind of commenting back by the SEC actually drives better disclosure. And we have seen that historically for years.

They can work with the PCAOB, which is the audit regulator, to ensure that auditors are competent to assess the risks of climate change. And they can work with credit rating agencies to incorporate climate risks where appropriate into credit ratings.

And then they can use a very powerful tool, which is the bully pulpit, and they can set expectations about quality of disclosure and the comparability of disclosure for companies that they regulate.

MR. PATNAIK: That’s very interesting, thank you. I think I'd like to move now to the joint discussion with Mr. Fink and you. And so I think we have seen this kind of, like, two sides. We have seen the market side that is already moving, at least on the public company side due to investor pressure to look at these climate risks.

And then we are seeing a lot of regulators around the world and now, including the United States, moving in that direction, too. So, Mr. Fink, I'd like to turn to you a little bit, a common questions, which is:

How do you think regulators can complement market developments? So, for instance, when we look at recent efforts by investors to steer investments towards low carbons alternatives. And since you brought it up earlier, I would be very curious to hear what are your thoughts on private companies? What do you think regulators can do in that space?

MR. FINK: Well, I think the capital markets are moving already. As I said, we are seeing valuation differences that are dramatic between renewable energy companies and other forms of that, of

EV vehicle companies versus traditional companies.

So the marketplace is already repricing the height -- you know, the companies are heavily hydrocarbon-based and are pricing to extraordinary pricing right now their renewable energy. I mean, what we are seeing today is an absence in the United States to invest more.

The capital is there to invest in renewables in other asset categories. Right now the pricing is, you know, you have to forecast a pretty good growth rate to get to the proper IORs to attain proper valuation.

I mean right now, you know, if you look at the valuations the hydrocarbons are priced so low, those companies, versus what the pricing -- so the capital markets are working, now we need more product.

And when you asked me where are we investing on behalf of our client, we're finding far more opportunities to invest outside of the United States. And that's one of the big issues is the foundation of finance in America.

Our foundation at the state and local levels is municipal bond market, and they're able to finance it at obviously tax-free type of rates.

And one of the big reasons why new have a $2 trillion deferred maintenance problem in America is, you know, we have state and local governments so much of their budget is being, is going out to their pension liabilities and we are not -- we are seeing actually a reduction in the type of investments. And they just don't have that much debt capacity.

So one thing, and this is why, whether it's the Obama administration, or the Trump administration, now, hopefully, the Biden administration -- the last three administrations talk about infrastructure and talk about infrastructure for renewables and different things.

It's very hard to execute in this country because our foundation of municipal finance. And we're going to need some type of overall program if we really want it to focus on how to transform America more rapidly. We don't even have a centralized power grid, as we are becoming more and more dependent on electricity and less through hydrocarbons.

You know, we're going to have to, you know, invest in our grids and so many things to make it work. And what I'm telling everybody, there is an enormous amount of private capital available.

We're just waiting for that opportunity.

And, you know, as I said, we're being -- we have to relook at how we are going to finance these national priorities. Are they a state and local priority, or do we have to relook at everything?

Now this is going to be a big debate on the role of federal versus state. I'm not going to go into our federalist charter, but much of it has to do with that structural problem in America. And we refuse to address these issues and that's why our infrastructure is decaying as rapidly as it is. And we're not preparing as a country as fast in terms of these issues.

Now one of the big questions that everybody asks is about pricing carbon and carbon pricing. Obviously, it's a very, very regressive tax. If we are going to do anything like that, we're going to have to think about how we use that revenues. In most cases, that revenue is to offset deficits. If we targeted those type of taxations for a redistribution of some sort, but also importantly for the buildout of renewables and other things that may make sense.

But let's be clear, society has determined that we're going to tax carbon, you know, and mostly in terms of the carbon used for private vehicles, in most cases. We don't have a carbon tax in agriculture, in fact, we have subsidies in agriculture, and agriculture produces as much hydrocarbons as, you know, private vehicles.

So if we're going to have a carbon policy of some sort, and you know this, it's going to be throughout society, or is it just going to -- are going to piecemeal this? So all of these issues are big macro issues that one company is not going to be able to address.

I mean I can raise the questions, but, you know, we need a holistic policy response, a holistic policy response on infrastructure and how we are going to move forward; we need a holistic approach, if we determine that there needs to be some type of carbon pricing.

I would argue that capital markets is doing it for the government already in terms of PEs but that, you know, but we need to have a much more holistic approach if we're going to do this and reach the targets.

MR. PATNAIK: And I think you picked up on an interesting point because carbon pricing -- most economists, and we're economists at Brookings, most of us, in Economic Studies. We say that a carbon price would be a way to steer investments. Right?

But I agree with you, I think it has to be encompassing. It cannot only have certain sectors, and you would have to say that all of those are sufficiently higher, I think.

And I think there are -- we have seen about 75 jurisdictions around the world trying to play around with different carbon pricing strategies. And I'd love to hear Ms. Schapiro's thoughts on this.

I mean what do you think about carbon pricing, and how can financial market regulation complement the carbon price? This is, by the way, also one of the couple of questions that we got from the audience.

And, again, I think Mr. Fink, to Mr. Fink's point, I think there might be ways where we can price carbon but then redistribute it back maybe to low-income families, for instance, to, like, mitigate some of that impact.

So, Ms. Schapiro, what are your thoughts on this?

MS. SCHAPIRO: Well, I also agree that intruding a carbon price could be a very effective way to reduce emissions, but we do need a holistic approach to it. And, Sanjay, you are much more of an expert on this than I am.

But I will say that last week there was a report issued by the Task Force on Voluntary Carbon Markets. It was led by Mark Carney, the former governor of the Bank of England, who also, by the way, created the TCFG when he was chair of the Financial Stability Board.

And it was really a blueprint for voluntary private sector markets, which could be very important to companies achieving voluntary net zero goals by funding really credible, voluntary carbon reduction projects to supplement their own value chain reduction effort.

So I think that's something worth looking at and whether they can be successful in scaling that market from the, you know, billions into the trillions, or the hundreds of millions into the billions.

But I do think a carbon price is important. Carbon, and climate change and pollution impose such huge costs and risks and they're not priced into -- maybe they are increasingly -- but they are not fully priced into, certainly, into the market and we need that to be done in order to lower then carbon emissions.

MR. PATNAIK: Great, thank you. I want to talk in my next question a little bit about the

interplay of regulations and legislative action. Mr. Fink, maybe if you can talk a little bit about this, too.

To what extent do you think climate change regulations, let's say, on a financial market side, should or could be complemented with legislative action? I think Ms. Schapiro has touched on this that this is another leg that we can rest on, or try to rest on to address climate change.

MR. FINK: We're seeing it, as Mary said earlier, we're seeing governments around the world starting to focus on regulation and disclosure. To me, if they want to move something much more rapidly is going to be more financial reporting.

Through that financial disclosure, you're going to see rapid changes, some rapid changes. But I just want to underscore the capital markets are pretty efficient over a long period of time.

We are seeing that reallocation of capital that I spoke about last year. We are seeing a dramatic change in the reallocation of capital. Even in the last month, insurance companies are raising insurance premiums in homes in places like Florida by 30% because models suggest rising temperatures.

They are raising the prices for other reasons too. We are seeing an agriculture, we're seeing crop changes that are dramatic over the last 10 years. Ten years ago, you have Iowa, the number one corn state, now it's the Dakotas because the flooding and the heat has made it a source seeing this reallocation of capital.

It is happening. It is happening every day in a little bit, but you look back and say, my gosh, look at the dramatic changes. I am aware people are having a harder and harder time getting insurance now for their homes in various parts, whether it's fire risk or a flooding risk, now because of these issues; that is a reallocation of capital. It is happening, and it's happening probably in an accelerated fashion.

So I actually believe the markets are recognizing this, and through more disclosure -- this is where regulation can play a role, if regulations suggested tomorrow, we're all reporting a TCFD and SASB, or whatever mechanism they want to use, I believe we will see this reallocation of capital occur even more rapidly and you will probably see more changes.

But, once again, if we're trying to solve the world's problem, not just public companies problem, this better be looked upon on a holistic basis. We have to look at what are cities and states doing just as much as public companies.

I mean it can't just be pressure on our public companies. It has to be a societal response. And if we don't do it intergovernmental, if we don't do it public/private, we're not going to achieve that target. And we're just going to -- we're going to just make it much harder for public companies to be public, and we're going to see more and more public companies going private. And that's not a good outcome.

MR. PATNAIK: That's actually a good point and I agree with you. I think especially the state and local governments are completely unprepared as of now. Their infrastructure, their resilience, they haven't really thought about these issues. I mean they're using zoning and flooding maps from 50 years ago, and this is really changing very rapidly. Right? So Ms. Schapiro?

MS. SCHAPIRO: Sanjay, could I just add on that?

MR. PATNAIK: Yeah, definitely.

MS. SCHAPIRO: You know, in a non-prescriptive congressional mandate around disclosure could be helpful in helping the SEC withstand the inevitable challenges to whatever disclosure rules they write.

But the reality is it's not necessary. The SEC, for disclosure purposes, has all the power they need to write the rules, to work with SASB to set the standards, to build on the great work of TCFD and SASB to get this done in relatively short order.

MR. FINK: The one last thing I would say related to is, if we're going to have some type of SEC rule, or a legislative rule, one of the greatest fears by some companies is until there is a true standard -- I have talked to CEOs and boards, they are so frightened of lawsuits.

And the biggest reluctance I hear from some companies is how to, you know, are they doing the right measurement? Are they doing it -- are they interpreting things wrong? And so they are so frightened of, you know, lawsuits.

And if we're going to be doing this there needs to be at least a temporary type of moment of, you know, of resolving this. And unless there is, you know, real malfeasance, companies should not be at risk of misreporting until we have some, you know, some agreement on standards.

Because the biggest fear, as I said, from companies now, who have not reported, is the fear of lawsuits, fear of misreporting. And there needs to be almost like a period of transition if we're

going down that path.

And I do believe that is a big, big risk with a lot of the general counsels of companies. And I'm sure Mary hears that too.

MS. SCHAPIRO: Yeah, and I agree, we need standards. There is absolutely no question about it. TCFD is a framework that works as a foundation for standards. But we need standards and we need them to be, if not identical, which they won't be, because IFRS works in 140 countries and U.S. GAAP works in the U.S. and a handful of other places.

But they need to provide comparable decision useful information. And they need to work together, the standard setters, to ensure that we have something that does work together, that doesn't disadvantage companies in a particular country, but also that gives investors the information to compare -- you know, Daimler-Benz and Ford Motor Company operating under two separate sets of accounting standards, but the information still needs to be something that investors can parse through and compare.

So I think it's got to be a global, we need a global standard -- I think I said this before -- to solve a global problem.

MR. PATNAIK: Yeah, I totally agree. I think that's one of the tricky part about climate change. Right? It's global, it is medium-, short-, and long-term, and so that's one of the issues that we haven't seen concerted action yet.

I want to turn to a couple of audience questions, which have been actually really excellent. So starting with Ms. Schapiro, looking at the disclosure standard and at the need for having a global standard, how can we avoid -- and this is a question from someone from Europe -- that we discourage companies from just trying to greenwash and trying to appear green or carbon-friendly when in fact they are not.

I think that's quite an interesting question.

MS. SCHAPIRO: It's an interesting question and it's a super important issue. And it's one I can tell you that IOSCO, which is the International Organization of Securities Commission, is highly focused on -- even the SEC has actually spoken to that issue in the past year and nothing will undermine the effort to create an industry of green finance faster than to discover that what we thought was green isn't really green.

And when you consider the fact that three out of every five dollars, or one out of every -- three out of every five dollars invested globally has an ESG lens to it. You recognize how really important that $30 trillion market is and that the investment be done based on the reality of what the product is, not what somebody hopes it is, or would like to classify it.

So I think you'll see a lot of action from regulators on greenwashing issues going forward. The taxonomy definitions that people can agree to are really going to be important to protect customers from being defrauded by products that aren't what they thought they were.

MR. FINK: But another issue related to greenwashing, and I said this earlier, but I want to frame it in the terms of greenwashing. And I'm not talking about, you know, definition standards. But I'm talking about, are we talking about greenwashing at a corporate level, or at the world level?

Because if a corporate sells the dirtiest stuff to some private enterprise somewhere in the world and then the private enterprise is doing exactly, or even worse offenses to the environment. How do you define that? The company looks better. They're not doing greenwashing. They actually, but all of the standards, they look better, but the world is probable worse off.

And so, because Europe has been much more forward-pushing sustainability issues at the corporate level, and because it is much more of a societal issue than in the United States, you're seeing the behaviors that are just spinning out of these assets which is the natural thing to do if you want to move forward. But you're not changing the world and you're not changing the curve of CO2.

MR. PATNAIK: That's a pretty interesting point I think, and then often overlooked.

MS. SCHAPIRO: Yeah, not decarbonizing when you just move the assets around.

MR. PATNAIK: Yeah, that's true, it doesn't help the global problem. Right?

Mr. Fink, I had a question from an audience member for you. And so, obviously, you have a lot of leverage for to actively manage funds in the companies that are in there. So how do you transfer some of that and some of those requirements to the passively managed funds, of the index funds? I think that's quite interesting.

MR. FINK: Well, I think there is going to be a revolution on that, as we get more disclosure from each company our ability to customize and personalize sustainable indexes or sustainable portfolios is happening.

The big growth area in 2020 has been more sustainable index funds and that is only going to accelerate. We can now customize for any public pension fund a sustainable portfolio that may closely track the S&P, or the MSEI, or whatever liability you wanted to do, but has more sustainable attributes, you know, more ESG, you know, higher ranking on all of the attributes.

It doesn't mean we are not investing in hydrocarbons, but we're investing in the best hydrocarbon company, or the best of this. And so I actually believe the revolution, the titanic shift in finance is going to occur, not in the active side because the active side is happening.

It's going to happen on the passive side and the index side where every company -- and for any public fund that is listening -- we can now array through this disclosure that TCFD is asking and SASB, as more and more company, we are going to be able to design and democratize indexes that are portfolios that closely approximate the liability that you're looking for but with more sustainable attributes.

And that's going to be the real titanic shift in finance that I don't think people see. Through this information, through the disclosure, we have finally the tools to then array every company and say, in this industry this company is better than the other four and we're not going to invest in those other four; that all five of them may be in an index. We're going to invest in that one company and we're -- so we're going to have a diversified portfolio of the companies that are meeting those standards.

And, to me, in the next three years, we are going to be talking more and more about the personalization and the customization of the liability that closely approximates the standard index, but we're going to be able to customize more and more portfolios, to me that's probably one of the most exciting things I see in finance.

MS. SCHAPIRO: I would say that that's incredibly exciting, in part, because millennials, I think, something like 95% of millennials want to invest in exactly that way. They don't want to take the standard option that provides them with high emitting companies, as well as low emitting companies, and to be able to customize for their purposes I thing is brilliant.

MR. FINK: It does mean we may owe to hydrocarbon companies, so it's not pure. But it's much better than what -- I mean we could create -- right now, we're in a path with the S&Ps, and that as a metric, we're going to be four degrees above.

We can create portfolios through the disclosure and understand the companies that are

personally probably more closely approximate of the targets of the Paris Accord; to me that's where finance is going to be radically changing valuations. And that's the reallocation of capital that I'm talking about. It's going to be titanic even in the index side.

MR. PATNAIK: That's a really interesting point. And I think, as you said, Larry, this might also include having some carbon companies.

But I think that's stuff we added here, as you see, for the next 50 years we are going to have it a big part of the economy but we can start phasing it out and focusing on those companies that are better, right, that are more qualified?

MR. FINK: And we want them to remain public. (Laughter)

MR. PATNAIK: Definitely, yes. But we are out of time. But this has been really interesting, really wonderful, and I appreciate both of your time. I know both of you are really busy. So thank you for joining us here today and for sharing your insights. This was upper fascinating. Thank you.

MS. SCHAPIRO: Thank you.

MR. FINK: Thank you.

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