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Webinar

Moderator: Reshma Saujani
Founder, *Girls Who Code* and *Moms First*

Introduction

President Barbara Van Allen

Good afternoon and welcome to the 712th meeting of The Economic Club of New York. I'm Barbara Van Allen, President and CEO of the Club. The Economic Club is recognized as the nation's leading nonpartisan forum for discussions on economic, social and political issues, and we've had over 1,000 prominent guest speakers appear before the Club over the last century and have certainly established a strong tradition of excellence which continues up to today's event.

I want to give a warm welcome to students from Rutgers University, CUNY Graduate Center, and Mercy College, who are joining us virtually today, as well as some members of our largest-ever Class of 2023 Fellows – a select diverse group of rising, next-gen business thought leaders.

Today, I'm honored to welcome our special guest, Karen Karniol-Tambour. Karen is Co-Chief Investment Officer at Bridgewater Associates. She oversees the systemization of Bridgewater's research into trading strategies and manages the development of proprietary investment management models. She publishes timely market understanding to clients and global policymakers via Bridgewater's daily observations. She also co-leads the firm's sustainable investing efforts overseeing the design of new

investment solutions with both financial and sustainability objectives.

Karen joined Bridgewater in 2006 after graduating from Princeton University. She serves on the boards for Common Ground and Seeds of Peace. She's a World Economic Forum Young Global Leader, was included in *Fortune's* "40 Under 40" most influential leaders in business" in 2019 and has been named to *Barron's* list of "Most Influential Women in U.S. Finance" for three years in a row.

The format today will be a conversation. We're delighted to have Club Trustee and Founder of *Girls Who Code* and *Moms First*, Reshma Saujani, doing the honors of moderating. As a reminder for everyone, this conversation is on the record as we do have a fair amount of media on the line. And with time permitting, we will allow audience questions who would like to use the chat box feature. Reshma, if you're ready I'm going to turn the mike over to you.

Conversation with Karen Karniol-Tambour

RESHMA SAUJANI: Yes, I'm ready. Thank you, Barbara. It's wonderful to be here, and it's so great to have this conversation with you, Karen. You know, since we do have a lot of kind of younger associates in the room, in the Zoom room, tell me a little bit about your journey. I mean you are now, you were the first-ever female CIO at Bridgewater, a huge accomplishment. Like what was your journey here? Because I think the

assumption is, is that it's unusual to have women sitting in the seat that you're sitting in.

KAREN KARNIOL-TAMBOUR: Well, first of all, thank you. It's really exciting to be here and an honor to be talking to a Club that's been around for well over 100 years with incredible speakers. My journey to finance was not a straight line. I was not one of those kids who sort of knew I wanted to do finance. I didn't know very much about stocks or bonds when I was in university. And I was, you know, kind of interested in how the world worked, looked around at jobs, stumbled on Bridgewater almost accidentally and really fell in love with the place, the culture, the markets.

I think that investing is just inherently a fascinating job because you get to kind of look at the world and think about what's happening, why, and try to predict what's going to happen next. And I love doing it with colleagues in a certain culture. So I kind of fell in love with the place not expecting to. But I think the fact that I didn't come into it as somebody who knew I wanted to do finance was, in some ways, a key part of my journey because it meant that in my first few years I was able to ask a lot of questions that might have sounded crazy or stupid without worrying about it because I didn't think, you know, this is my life's calling. I kind of said I'm going to see how this goes. I'm going to learn. I'm going to figure out what's interesting to me and that gave me the freedom to kind of explore and learn and be curious.

And in many ways, I think curiosity kind of underpins a lot of investing. You have to be interested, curious, ask questions, learn about what's out there in the world. So I joined Bridgewater out of university and have been here since 2006 in a wide array of roles. And obviously, as you can imagine, to get to this role I had incredible mentors along the way.

RESHMA SAUJANI: So, I've got to ask. What did you major in, in Princeton?

KAREN KARNIOL-TAMBOUR: I was at what is now called PS School of Public and International Affairs. At the time, it was called the Woodrow Wilson School. It's been renamed. I had a pretty broad set of interests. I was pretty quantitative for someone interested in a school of public affairs, but as an example, I wrote one of the famous junior papers that they do about game theoretic outcomes in North Korea and what happened with kind of the issues there. And I wrote my thesis with Danny Kahneman about a topic that feels very pressing now, which was about how polarized America is and people's perceptions about how polarized it is relative to how polarized it actually was. So, as you can tell, I was not planning on going into finance.

RESHMA SAUJANI: Yes, I mean it's interesting. I think it's a good point, though, like so much of the global macro-environment actually affects what's happening in the markets. We see this all the time. And so I think having a sense of what's happening in the world,

having a background in international relations, I think, is actually quite appropriate and important for this work.

KAREN KARNIOL-TAMBOUR: And I'd say the flip side too is, you know, you can study, for example, China, from a lot of different perspectives, but you realize at some point that if you don't have perspective about what's happening in China's economy, you can't understand it. Because it's a huge part of what drives Chinese policymakers thinking about what to do and so you're kind of driving blind if you don't actually have perspective about the economic aspects. They just influence a lot.

And so from both of these perspectives, you know, what's happening in the world is so intertwined with finance, so intertwined with how economies work, that you kind of need both sides of the equation to understand it. And that's only becoming more and more true. I think you could have survived as an investor for a while knowing relatively little about some of these issues. And now I would say that, you know, geopolitical issues are becoming much more important for investors to understand. Generally, government policymaking is becoming a bigger deal for investors because more social and environmental outcomes are playing a role in driving how governments are looking at the environment and choosing what economic policies to put in place. And so the worlds really are colliding and you need to understand these issues to understand the markets.

RESHMA SAUJANI: Yes, so let's get into it. What is happening in the world right now? Give me a rundown.

KAREN KARNIOL-TAMBOUR: Well, let me take you back a little bit, not to go too far back, but I think we basically lived from the 1980s in one world and environment that investors have gotten used to because naturally once things happen for a long time, they become kind of in your bloodstream. That's what you expect is going to happen, the cause-effect linkages you're used to, your intuitions. That was a long period of time that was pretty much world peace. There's never a time where nothing bad happens, but relatively speaking, a pretty stable world order, the United States in the middle, constant integration, falling global inequality, even though it was rising within countries, of integration of four countries, most importantly China, into the world economic system, so strong globalization and a really large disinflationary force coming from the fact that everything was getting more efficient and cheaper – your labor and where it was cheapest to do it – were globalized and well-integrated.

And that massive deflationary force meant that the kind of, you know, gravitational pull of inflation was to like zero or 1%. And there was an ability to constantly get the interest rate lower and lower because one way of thinking about it is that policymakers didn't ever really face tough constraints since the Volcker era. Every time there was a slowdown, there was nothing on the other side of the slowdown except for go and ease

more because inflation never really reared its head as a major problem. So you had constantly lower interest rates, higher debt burdens because you can take on more and more debt at these lower and lower interest rates.

And we kind of hit a limit of that in 2008, which was obviously a major turning point. You get the global financial crisis, our debts become higher than we can service, and we move into this period of ten years or so of deleveraging. Rates are now at zero. They can't be lowered anymore. We print a tremendous amount of money under quantitative easing to try to get the world out of this and really enable that deleveraging to happen.

And we lived through those ten years and I think a number of things happened. I think that the Chinese kind of looked and said, wait a minute, it doesn't look like this western model is so perfect after all if they're running into this deleveraging problem. And we learned that just printing money through quantitative easing kind of has its limits because when you print a lot of money through quantitative easing and give it to people, you're printing to, say buy a bond or buy a stock, you're counting on them to choose what to go do next with what you print as your quantitative easing. And so it can just get stuck. Japan has been furthest down this path – a lot of years of printing and a lot of money printed – sort of just got stuck.

And I think COVID, a lot of the tensions of this model kind of not working anymore,

okay, rates are at zero, you've already printed a lot of money. And I should add, for many, many years, since the 1980s and even before that, you could pretty much say if growth is good, you're also getting good social and economic outcomes at the same time. So if you just looked at the growth level, that was pretty much telling you the answer. Are people standards of living rising? It was a very good proxy.

And that started breaking down as well. We suddenly started seeing that you had more inequality. You had people having environmental degradation, other social problems. Suddenly it was like you could look at, find general growth numbers and actually get pretty bad social and environmental outcomes and start getting a lot of frustration about what these decades of globalization and deteriorating social and environmental outcomes looked like.

I think this all really kind of hit a wall with COVID. In COVID, you get this explosion where suddenly the world economy is at massive risk, nothing we've seen in decades, and there's nothing to constrain us on the other side. Sort of like everything is pushed in the same direction. Just do everything you can to help the economy, do everything you can. You can't let massive unemployment happen. You can't let bad health outcomes happen. And there hasn't been inflation in a long time, and printing you've already done, and it has kind of stopped working.

So you've got a massive amount of printing alongside government policy. We've called this sort of Monetary Policy 3, the third generation. Instead of just lowering and raising interest rates, generation one, quantitative easing, generation two, you put monetary and fiscal together. You basically print money and literally give it to people. And we did that, in the United States we just sent people checks. In Europe, we kind of augmented their incomes by making sure even if they were fired, they still got income. But the short story is we printed money and we directed it to where it was needed.

And now we're on the other side of that facing the turn to a very different economic environment. I don't have to tell you, I'm sure we'll talk about this more, but the world is entering a stage of much more disorder as China kind of catches up with the U.S. and tension starts rising and we start seeing China as a competitor. We're saying we're not sure we like its rise quite the way that it's going on. And now we've unleashed this wave where the gravitational pull of inflation is no longer to 1%. It turns out when you send a lot of people money, they spend it, and we've unleashed inflation we haven't seen in quite a few decades.

Alongside, now we have a lot of needs to spend money that are no longer for efficiency, you know, making labor cheaper and building things abroad. Now we've got to spend money to stop environmental degradation, to actually stop climate change. That is inflationary spending. We've got to go remake our whole energy system. Now we have

to spend money to get resilient for geopolitical reasons. What does that mean? Double do your supply chains. Rebuild again in a way that you feel is safer. So this whole way of spending that is kind of the opposite of the prior way, much more inflationary is ahead of us. We've kind of gone out of this world of many decades of, you know, peace, stability, lower and lower inflation, to a different economic place. And this, I think, underpins everything we're seeing in the markets, that transition to kind of a new economic paradigm.

RESHMA SAUJANI: That's fascinating. So what are the trends then you're watching at Bridgewater closely? And what do you think this audience should be paying attention to?

KAREN KARNIOL-TAMBOUR: Well, I think that everyone is rightly paying attention to what is actually the gravitational pull of inflation today, where is inflation going to go? There are a lot of one-offs along the way. Where is really the gravitational pull of inflation? Without tightening, where is inflation going to settle? Are central banks going to be okay with that?

My guess is the gravitational pull is no longer to 1% and we're going to find inflation being, you know, stickier, and a problem that needs to be addressed where you finally have central banks that have constraints, actually thinking I can hurt the economy or I

can control inflation and I have to trade these things off in a real way rather than just stimulation always being the answer. And what this weekend, I think, is a good example of is you're going to get geopolitical events where you have to pause and say, wait a minute, we can't just rely on the world being just a calm place where kind of nothing important happens geopolitically.

We've unleashed a world of a different kind of disorder and there are both longer-term consequences – big political choices we're making – things like the Inflation Reduction Act, the CHIPS Act, to go do spending to really counter China, counter geopolitical rivals to get more independent. And you're also going to get in the moment flare-ups and questions of, you know, think about all the ways that this weekend's events in Russia could have gone. It could have gone in a lot of different directions. It could still go in a lot of different directions. And that just opens up the aperture for investors to have to look at different possibilities of what might happen geopolitically and how it will hit all the assets that they hold.

RESHMA SAUJANI: Should we have done something different besides sending people money?

KAREN KARNIOL-TAMBOUR: I think we did a great job to counter COVID given what we knew at the time, and we did incredible work to limit what the effects could have

been. And you see around the world that it mattered. It mattered how proactive governments were in terms of supporting households through it. Since then, I don't think we've been proactive enough in saying now it's time to tighten conditions. Now it's time to get inflation under control.

RESHMA SAUJANI: So inflation and interest rates have dominated the economic news lately. Where do you think the economy is headed? I feel like every week it's like we're in a recession, we're not in a recession. Things are getting better; things are not getting better. The market's doing better, it's not doing better. Like, look in your ball and tell me what the future is, and do you think that there's more interest rate hikes in our future?

KAREN KARNIOL-TAMBOUR: So I would say there's a reason why people are experiencing this sense of unsuredness, right? A lot of things have changed and a lot of things that happened coming out of COVID were highly unusual. Just look at the fact that you don't usually get huge divergencies between, for example, goods and services in the economy. They kind of grow their spending together. And there's been huge differences. You were stuck at home; you could only buy certain things. You can't do other things. So things have happened that are highly unusual.

And I would say that you can never be sure, but I see two potential paths that both are somewhat at odds with what I think the markets are pricing. But I think one path is that,

look, we've already hiked interest rates a good amount and some of the effect of that is still in the system. Growth has slowed and you could get it slowing further, whether from a shock we're not expecting or just some lagged response to what's happening, and the economy could slow from here.

And I think if the economy does slow from here, it becomes a very painful time for the Federal Reserve. It's going to be saying, wait a minute, I don't really want to have to stay as tight as I am. I should be easing into this weakness. But at the same time, inflation is not coming down as fast as I expected, even with the slowing economy, because you're starting at such high levels of activity, such a tight labor market. It's going to take time for that stickiness in inflation to really come down.

The other path is that we're not there yet. There's still enough sustaining momentum in the economy and it has some room to run. And I think that likelihood is pretty high, but in my mind, the Federal Reserve is just going to have to do another round of tightening relative to what's expected. So the Federal Reserve is now priced in by markets to kind of do the best of both worlds – both be able to ease and have inflation come down with no recession. And it's kind of a magical Goldilocks outcome.

Much more likely is that the economy keeps chugging along and the Federal Reserve gets somewhat uncomfortable and it's just how much it's expected to lower interest

rates quickly given inflation just ends up being stickier than that. And we need another round of tightening in order to slow growth more, in order to get the inflation outcomes that are acceptable.

RESHMA SAUJANI: But is that even possible? It almost feels like by sending people money, like our expectations have changed. The way we travel, where we travel, how we spend money. Right? It's quickly shifted. And I think part of the challenge, when I spend time with my father I'm always like taken back a little bit. Because if you look at some of the, like the jobless rates are down, the economy seemingly is healthy. But when you talk to people, like my father, senior citizens, they feel like it's not. And so how do you reconcile some of this?

KAREN KARNIOL-TAMBOUR: I think that the composition of what is good and bad in the economy has changed for sure because so much tremendous change has happened in the last couple of years. And you do get pockets that feel different things are going on. Another example of a pocket like you're saying is what's happening in tech. It feels like a different world. They've had job losses. They have __ unemployment ever. They've had job losses. They kind of are going through their own cycle. And I've talked a lot about the inflationary forces.

Something like AI is likely to be an inflationary force in the future for the full economy.

The one place it's already hit is if you're a software developer. You hear software developers say things like, I hear software developers say things like I'm three times as productive as I was a year ago. That's very rare to have people talk about productivity in such a significant way. But the reality is that that pocket is what it is, which is a pocket. There's not that large of share of the economy that works for the big tech companies that's already impacted by AI in such a direct way.

And so when you step back and add it all up, you have an economy that has certainly slowed from its, you know, kind of gang-buster days, but it's still chugging along. But that rearrangement of the who's, we've learned that composition is more important than we thought.

And another example of that is all of the political backlash that we've had, you know, to globalization and trade and all that is clearly from not spending enough time thinking about the composition and the fact that some workers do get displaced and these do have outcomes once that happens. If I look back at the last, you know, three or four decades I would say that the fact that we weren't very good at handling the displacement of workers, probably 10%, 20% of the economy. We probably started this whole period with maybe 20% of the economy in manufacturing and then completely remade the manufacturing sector.

It went from every person working in manufacturing, it's either been totally outsourced somewhere cheaper, or they're radically more productive. They're in, you know, a factory with robots around them and really augmented by technology. And so it kind of remade, maybe 20% of the workforce into something more like 7 or 10. In numbers, you're like, that's a piece, but it's mattered. Right? It's had huge political and economic consequences to remake the economy that way through trade and globalization. It was hugely deflationary. It supported a lot of corporate profits. So a lot of these compositional issues, they do matter.

RESHMA SAUJANI: And how do you think we get ahead of it? I mean, I think AI is an interesting perspective. Right? Because the jobs that are going to potentially be displaced are white collar jobs. Right? You're already seeing that happen in tech where they're just not hiring the same level, entry-level engineers, as they were doing before this. Because they know it's been happening and it's happening faster, you know, the augmentation, than we thought it was going to be.

But how do you, and who is responsible for that, a little bit? Right? Like, should we be getting ahead of having basic income legislation? Should we be already thinking about how is this technology, how is AI going to let us augment human intelligence in a way that actually can have us produce more? So you don't have to kind of reduce the types of jobs. Who is responsible for this? And do you have faith that we're actually going to

be prepared to take advantage of this moment? I think there was something like the United States actually has more AI companies than any other nation. We could actually win this race in many ways if we embrace it.

KAREN KARNIOL-TAMBOUR: You know, you have to start answering a question like this by saying you've got to acknowledge there's a lot more unknowns than knowns and that what we know is going to change a lot between today and just a few months from now. There's few topics where I could say, you know, sitting here in June 2023, I thought something very, very different six months ago. There's just not a lot that has you say, wow, in six months your view has really changed. This technology is evolving quickly and we're going to have a lot more answers in a few months than we do today. And so you kind of have to start any answer to this with that level of humility. And I think an important part of an investor is knowing what you don't know and knowing the wide range of what could happen that you just can't anticipate well.

What I would say is that the potential for disruption is certainly massive. So if you take the comparison I just made to, okay, you had a few decades where you took 10%, 15% of the economy in manufacturing and really displaced them and the ones that remained are much more productive, the estimates that different people have made, you know, BNI, Goldman, McKinsey, whatever, all these estimates point to this could be another 40% of the economy. Much bigger numbers. And like you're saying, generally higher

earners that it would displace in manufacturing.

So if you say, what are the economic and social consequences of doing what we just did again, which was hugely impactful on corporate profits, on level of inflation, and on displacement, and therefore kind of more social outcomes. This could happen again and be three or four times bigger. So that potential is there. And we know that it could be faster because it really does take time to go set up a factory in India. That's not going to be like I thought of it and six months later I have the factory. That's going to be a process. You have to train people and build a factory. We know this could happen a lot faster. And so the potential for very significant disruption happening quickly is certainly there. It's going to be something that requires a lot of vigilance and following and seeing how the technology adapts and how corporates get set up to utilize it, how it actually gets integrated. It's just a lot of unknowns there.

What I would say is that a very significant positive on this is that, you know, there are a lot of downsides for rising competition with China. Obviously, we don't want to see a Third World War. But one of the upsides is that I think it's changed our mentality in the United States, in Europe and a lot of the wealthy countries. In the United States, in particular, I think we had a little bit of, almost like allergy to this idea that government should have a lot to do with how the economy works. Right? Like it's a free market, winners should determine winners, we shouldn't have a lot to do with this. And now

we're looking at China and saying, wait a minute, if they're going to have like a top-down view of what they want to accomplish and just subsidize the things that they really want to get done, and we just fail to do that, we could be totally behind.

And we're seeing outcomes like that today where they're out there saying these are the technologies we want. If you look at something like, you know, solar panels or electric vehicles, they have put so much money behind making these things work, I'm sure some of the money was hugely wasted in a way we've never had an appetite for in the past. And yet, you know, you put enough money against something by a non-economic player, they've made huge strides and they're leaders in a lot of these green areas.

And so when you look at the legislation that's come out, whether it's the CHIPS Act or the Inflation Reduction Act, and now it's a very healthy, almost global competition to be like the leader in this kind of legislation, the Europeans are saying, wait a minute, we'd like to be leaders in this and everyone kind of compete to do this. A really good thing is happening where government is a lot more active and focused in thinking how do we shape the outcomes that we want here and not be scared to kind of direct resources.

And in a lot of these issues, without that kind of top player willing to do that, you're going to have a lot of challenges.

Now, back to the AI question, if you compare how hard it's been on something like

climate change, to get us to actually put the right structures in place, in a case where we know exactly what has to be done. Right? We know that what we're trying to do is say carbon bad, reducing carbon, good. Just create me the playing field that's going to get the private sector to do that. So don't subsidize coal. Don't subsidize oil. Subsidize things like carbon capture. So, like, we know the basics. We know what we're trying to accomplish and it's all just been a political difficulty and process to get there.

You compare it to AI and that feels really scary because there we don't know. We can't give you a really simple set of equations the way we can for something like climate change to say these are the things you want incentivized. These are the things you want to cut off. And so given how hard it's been for us to kind of get our act together and have the kind of, just playing field in place where companies can say I'm incentivized to go cut my carbon emissions, it's going to be a much harder road in AI because we genuinely don't know. There are a lot of people who, you know, are coming up with things and ideating. But at the end of the day, it's moving fast and nobody can give you a great play book of what the right answer is.

RESHMA SAUJANI: Yes, don't you also think a big part of it is the fear-mongering, the idea that AI is going to basically destroy us and we're going to be, like taken over by Terminator 2 in a minute. It's also, like climate was the same. Right? It was like if we start focusing on climate change, we're going to shut down manufacturing. That's going

to be bad for working families. And so, I think AI you're kind of having the same thing interestingly right now, which is like you almost have to start with a culture change. You have to start with people's kind of hearts and minds and like frame it as an opportunity. And I think that that's, are we going to be really good at doing that? Are we being good at doing that? So far, I don't see, you know, I think there's a little bit of progress on that but not much.

KAREN KARNIOL-TAMBOUR: I love the climate comparison because on the climate side you can scare people and say if we don't do this, here are all the bad outcomes. Right? You're going to have droughts and you're going to have...

RESHMA SAUJANI: It's going to be 125 degrees in Austin, Texas today.

KAREN KARNIOL-TAMBOUR: And there's truth in that. People do need to understand that the world will change in real ways. And I mean, like parts of Antarctica will be totally uninhabitable and ___ is going to be under water. And you need to understand that the consequences are real unless we are tackling it. And you also need to have the side of opportunities, which is, wait a minute, if we do this well, we could really be a national leader in new industries. We could actually be competitive in new ways. And if this is the place where the world is going, we could really be leading there.

On AI, we don't even know exactly how to describe those two things. So if we think we don't know much about climate and the bad consequences, we know a lot less. There's a lot of hypothesizing and what kind of bad consequences could happen from AI. I don't think anyone knows for sure, but it is worthy of considering. Just like some of the climate things are not linear and we know we have to consider what would happen "if", I think we've got to consider it in AI and consider that was part of what we weigh. And at the same time, we don't know the side of opportunity yet. It's harder to visualize what exactly leadership means beyond, you know, the case that we can already see, like Nvidia. It's a little harder to visualize what the leadership there means relative to something like climate, where we kind of have more of a road map. Okay, if carbon capture is going to be a thing, or hydrogen, this is how we do leadership there.

RESHMA SAUJANI: So we talked a little bit about what's happening with China. So amidst our own kind of domestic economic challenges, we're also seeing geopolitical ones. We just saw this weekend, it was very interesting, you know, what happened in Russia, Wagner, etc. What are you guys watching at Bridgewater?

KAREN KARNIOL-TAMBOUR: Oh, everything.

RESHMA SAUJANI: Everything...

KAREN KARNIOL-TAMBOUR: Well, I'll give you an example. It's a good example of how you do an investment process that is systematic and fundamental at the same time. When you're talking about something like geopolitics, which by definition has a lot of emotions, a lot of personal opinions, you live through something like this weekend, you're in the fog of war. Like you're hearing different things on Twitter. You don't really know what's happening. No one's in the head of these people. So many things could happen.

And we've tried to set up a process that tries to bring the best of all these worlds together where we basically look out on the world and combine both qualitative and quantitative inputs to say, is something going on geopolitically? So it can be, you know, someone saying I wonder if there's going to be an event like this in Russia, but it can also be different types of market pricing, what the options markets are showing, different SKUs, different expert opinions to try to bring together kind of a model of the world that says where are the hot spots where something might be going on.

Obviously, if you look at it today, it would say, you know, Russia's been a hot spot for a long time, but something like Turkey, when they went through their elections. You're trying to see different measures of saying what's happening here? And then you're trying to turn that into something that can actually help you as an investor. And I'd say there are a lot of questions to be asked but an important one is that investors sort of

have to place these unknowns and why are they relevant to you.

And I would say two kinds of spectrums to put them on, one is, is this a big deal or a small deal to your portfolio? And so if you're like in an election in Thailand, it totally cause chaos in Thailand, but how much exposure do you have to Thailand? And the second is, is this a one-off idiosyncratic, like it'll happen or not moment. Like you're looking at Russia, are you saying, will Putin's regimen collapse? That's like a very kind of it'll happen or it won't type of question. Or are you talking about more of a longer-term trend where you're saying there are things pushing in that direction, that trend?

For example, if you take China, I'd say a moment, something very, like particular, is will they attack Taiwan? And if that happens, what will happen? Versus a trend is I believe that so much money is going to be unleashed to be spent on competing with China and countering China. So that's something that regardless of exactly how the tensions with China play out, you could say there's a multi-year kind of movie here that's going to be affecting markets to deal with this competition with China.

And that kind of mapping helps you know how do I want to invest my resources and how am I going to follow this. The more it's something that's a one-off and it doesn't matter that much, you've got to think about more like a risk control. Just how much money could I lose? I'm not going to be able to predict every election, every issue in the

world. And the more it's a long-term trend, the more you can actually become an expert in what are the cause-effect relationships and how do I incorporate that into my view of the market? Something like this, I take it like a wall of uneconomic spending that's going to happen to counter China.

RESHMA SAUJANI: So let me ask you a question as you've been at this for a while. How has social media changed this? The example that I'm thinking about is Silicon Valley Bank. If you were just watching *Meet the Press* or the news, it was clear that some of our elected officials didn't really realize that there was a run-on banks happening. And that they couldn't wait 48 hours before they were making a decision. If you were watching Twitter, and I'm sure as an investor you were like, oh God. You know what I mean. So you've been at this awhile. How have you seen the role of social media actually play in evaluating some of these decisions?

KAREN KARNIOL-TAMBOUR: I'll give you an example where information is spreading in new ways and spreading quickly. And so, certainly relative to many years ago, there's a lot more spread of information. It can also spread misinformation, right. But as an investor, you know that any information you have that's of quality might spread a lot faster. And you also know that there's a lot of junk you're going to get relative to all information.

A similar analogy I'd say is some number of years ago we used to have a rotating cast of characters show up in our office or on email or whatever, offering to sell us exciting new big data. Everybody was like, I got the new big data for you. And the reality is, there are a lot of people just saying wow to such a huge amount of data, let's just put it through lots of machines and see what comes out.

And we realized that you have to be oriented at what questions are you trying to ask and why. And if you're asking the right questions, it's amazing, you're looking at the world and you're saying I have so much better information than I used to and you can use it to make better decisions than ever.

And AI can actually be a tool to help you make better decisions than ever, but if you're not thinking that way, and just kind of looking at everything that's out there, you're just as likely to make errors and get a mess, because it's even harder to evaluate, is this even the right question to be asking. Why am I looking at this piece of information.

RESHMA SAUJANI: Are you using AI in your research right now?

KAREN KARNIOL-TAMBOUR: It is an active area of research. So, it's not a thing driving our investment process today, but I think it would be crazy for anyone in our shoes not to be thinking, well, as the technology evolves and we have our own history

also of using AI and thinking about AI, to be, kind of thinking, what's the right way to use this for investing.

I think there's a lot of caution that should be put into use for use in investing. The problem with investing is, it's fundamentally a very different problem than like recognizing speech or recognizing a cat. But there's a probability that some technology is going to be helpful and it's kind of where on the spectrum. We already use it for things more like data cleaning. But I'd say it's definitely more of an area of active research than current marketing.

RESHMA SAUJANI: Do you have an example of what people are talking about, how they think it could be used?

KAREN KARNIOL-TAMBOUR: My view is that it is so early, that there's so many ideas out there, and you're going to see a lot of blow ups and mistakes before there's a settling into how this is useful. The technology is so new and developing so quickly.

RESHMA SAUJANI: So right now what do you think is the biggest risk in the current macro environment?

KAREN KARNIOL-TAMBOUR: I'd say the biggest picture, those investors that don't

have portfolios really well set up for the tech environment I'm describing. And you're in an environment where you could easily end up with both stocks and bonds not being that attractive at the same time. And it's kind of a core of what investors hold. And so, a stinkier than expected inflation where more tightening is forced upon us to handle it, but then ends up being bad for both stocks because you have to slow the economy, and bonds, because inflation is higher than expected.

You kind of end up with a lot of the core holdings of investors not being that attractive. And you're coming out of a time where for a couple of decades if you basically just held U.S. stocks you did great. There was no point in really doing any money management. Just buy U.S. stocks, good stocks are great. U.S. tech companies eat the world and there's a real risk that won't be the case anymore. Partly because once that's happened for a few decades, it's in the price. It's already expected that U.S. stocks will be great. U.S. tech companies will be great.

So, it's not hard to think about scenarios where things change. You have to outperform so much relative to what's already in the price for that to remain kind of what happens in the world. And that is what's riskiest for most investor portfolios is having a core of most investments out there.

RESHMA SAUJANI: I want to go back to talking about sustainability, and it's a big part

of your career. You kind of rose through the ranks of Bridgewater with a focus on sustainability. Can you kind of speak to how Bridgewater thinks through sustainable investing?

KAREN KARNIOL-TAMBOUR: Absolutely. Fundamentally, we think about it more than anything as an engineering problem. When you have a goal to consider sustainability, and I should pause and say, a lot of institutions around the world and a lot of individual investors are pausing and rethinking and saying, I do have a goal around this.

You hear people saying things like, wait a minute, if my whole point of investing, and most people invest for purposes of leaving money behind to the next generation. If what I'm trying to do is leave money behind for the new few generations, would I really want to get a slightly higher return even but leave behind a horrible world. That totally defeats what I'm trying to do.

And so you have a lot of investors kind of adopting a perspective of, I don't only care about making returns, I also care where my money is going. The most common version of this is net-zero's, climate alignment. It's basically saying, okay, I want to make money as an investor, but I also need my money to be supporting a transition towards net-zero. I hope that will also make me money, of course, but I definitely don't want to be funding kind of the other side to this. I don't want my money going towards

perpetuating, making damage to our climate.

So, if you kind of go into the world and say, I want to think about where my money is going. Fundamentally it's an engineering problem where if throughout investing for decades what you've really asked managers to do is say I want to get the highest possible return for the lowest possible risk.

Another words, your engineering everything you're doing to say what's the return, what's the risk level, give me the highest returns, the lowest risks. Now you actually are really doing a third dimension here. You're also thinking where is my money going? What's the impact along the way? How do I think about impacting sustainability as another dimension in everything I'm doing?

So now you've kind of turned your investing problem from a two-dimensional problem to a three-dimensional problem. And you need to open up all of the things that have to do with that dimension. It's to think about data. We know so much about how to think about risk data, you stop for decades, but all the ways to measure risk and why value risk is not good for this, if you can think about skews, and we have a whole risk institutes. We're just starting to do the same with the question of what does it mean to measure sustainability. What does it mean to have quality sustainability data? What are all of the different measures? What is sustainability today? If a company is changing its strategy

will it be more sustainable in the future? We're so early in learning all of that.

As an investor we kind of came into it saying this is first and foremost an engineering problem. How do you basically develop that whole third dimension, to think about how do you look at an investment and say whether or not it's a sustainable investment and then how do you engineer a portfolio to now think about this third consideration alongside the other two.

RESHMA SAUJANI: Yeah, I'm on the board of Harvard and we were kind of talking a lot about how with the shift in people's focus on climate and first there was a lot of resistance, right, towards doing it. And then in many ways VC has tried to figure it out, kind of how to make money off of also being good to the environment. And that is where you kind of saw a big shift. Would you say that that's true?

KAREN KARNIOL-TAMBOUR: Yeah, because once investors come and say, look, I would like, I don't only care about risk and return. I also want to know where my money is going. Then, you unleash a whole investment industry to say great, now I can engineer around that. And we know at the end of the day, that when you hire us, like anyone else, you want a high return for your universe. We know that.

The question is, is there this other consideration and I think an amazing thing is

happening where more and more institutions and individuals, of course, are basically considering sustainability as part of what they're trying to do as investing and that is, creating an investment institute starting to answer these questions. And we can do a better and better job of being able to deliver high-risk-adjusted returns that are also sustainable.

RESHMA SAUJANI: Yeah, but it's interesting. I feel like the opposite thing is happening with diversity and DE&I, right, almost like a recessionary period, people feel less about doing the right thing, and more about kind of what's the right thing for business. Which they may think is at odds. I don't know what you think about that.

KAREN KARIOL-TAMBOUR: I feel that the finance world I see is nowhere near where it needs to be but it's transformed relative to when I joined it. I remember years ago being in a conference outside of Bridgewater. And thinking something like, why is this a women's issue conference. I didn't think it was a women's thing. And I said, you know what Karen, just count and I started counting everyone in the room. And I realized the room was perfectly 50/50, and I realized, I'm totally messed up. I've been in finance so long that I'm in a 50/50 room and I'm thinking why is this a women's issue. Because I've just been for so long in rooms that were so far from that.

I think that the industry looks a lot better. It really looks transformed relative to when I

joined in 2006. You see a lot more women in a lot more positions in power. You are much more likely to see women in core investing roles. You used to see more women in kind of more supporting roles around that. And I think the understanding and realization that this is a matter of just, if you've never seen a women in the role, so you can't imagine it yet, and it starts changing once you do. And the ball starts rolling. It's totally different. I think that we are not where we need to be, but I think the industry has made huge strides.

RESHMA SAUJANI: I mean, it's interesting because I think there's probably more women in many ways graduating college with, in majors, diverse majors, but also in finance and statistics. At *Girls Who Code*, we're almost at parity, in 15 schools in terms of engineering and computer science. So in your experience, what do you, how do you kind of, what's the difference between the incoming class that comes in at a Goldman Sachs and who's leading the firm? What's your observation of what the drop-off is about?

KAREN KARNIOL-TAMBOUR: Well I'd say, first of all, getting to a great incoming class is a relatively new thing. And so it's not that the people you see in power today or in senior positions today, came in at these super diverse classes and then people dropped off along the way. By and large in finance, at least to a place I've seen it, certainly, I didn't come in to a class that was anything like 50/50 women, right.

So, to actually see some of the other ___ when I've look at it at Bridgewater, I think at Bridgewater our success rate of women that have come in has actually been higher than of men. We just haven't had anything like 50/50 join. And so, you have to kind of say...

RESHMA SAUJANI: Say that one more time. You're saying that your success rate of women actually being promoted is higher than men?

KAREN KARNIOL-TAMBOUR: It's like, if you look at basically our incoming and certainly in ___, I think we've actually, as a ratio, have done a better job kind of keeping, getting the senior roles and so on. But think about it, if you have very few women join and now you have a bunch of women in the ranks, you're actually doing pretty well getting them up the ranks. So you have to kind of say where in the funnel is your problem.

I'm certainly, like a lot of people have done more analyses than me. But my experience with it is you have a real problem at the beginning of the funnel, a lot of women still feel like some of these roles are not for them. Aren't applying as much. You have some bias at interviewing. So, I don't think you're getting such diverse class at the beginning.

That's gotten a lot better.

Generally a much more diverse class is coming in. There's more awareness of bias at interviewing. There's more of a sense of encouraging women to look at roles if they happen to haven't been sort of looked at as well as minorities. And you look at firms like us who are doing outreach, they would never have done 10 or 15 years ago, to go to a place where we're more likely to find under-represented minorities, to seek out people who don't know if they want to get into finance. To crowd people that this is kind of not their life dream. And tell them why it's a great place to be.

And then you know the next obvious drop off, that certainly has happened, is around motherhood where I think the most ___ thing that I've personally seen in my career is making maternity leave standard. Because it's totally changed the game, in my opinion. Now it's like, there isn't this women thing called leave, it's more like, if you're in an environment that is say 75% men, 75% of the time we're talking about leaves, you're talking about men taking parental leave. So that really changes kind of people vices around what are these leaves. It's something that men do just as much or more than women in your mind, if you see more men than women.

I think that we're doing a good job but it will take time to get through it all. Kind of systematically saying, where in the funnel are the numbers dropping off. And then, what's the impact then, to kind of drive through.

RESHMA SAUJANI: Karen I really appreciate you saying that. Because that's the work I'm doing at Mom's First, is really trying to get affordable childcare and paid leave passed. Because the reality is, is that you're point about focusing on where in the funnel is the drop off, I think is critical. And I think if you really kind of look at it, we don't have a gender problem, we have a motherhood problem. And the minute you become a mother; you make \$.58 on the dollar. We live in a country where 90% of low-income women go back to work two days after having a baby. Two-thirds of care giving work is done by women. So paternity leave just shifts the gender ratio of work, which then allows women, I think, to stay in the workforce and thrive.

I love that point. And this is kind of what I state at companies all the time, like you just said, focus on the place in the funnel where you're actually having the drop-off and then think about what the interventions are there.

This has been a great conversation. I think I can speak for the entire female population that having you in this position at Bridgewater is just huge. I always say you cannot be what you cannot see. And I think that there are now millions of girls that are kind of looking at you and saying, I can do this too. And you're pretty much one of the smartest people I've talked to. So thank you for this incredible, kind of, I think, lesson. I took more notes on how do I look at what's happening in the global macro-environment right now. So thank you for your brilliance and for your leadership.

KAREN KARNIOL-TAMBOUR: Thank you. It's very kind. I should say, I'm a mother of two girls.

BARBARA VAN ALLEN: Well, thank you both and I have to second what Reshma said, I would say, this was one of the most brilliant conversations we've had. And really amazing, and so thrilled that you're there.

I want to just do a quick look forward for our members so that they know. We just, today, confirmed for July 10th, Lael Brainard, the 14th Director of the National Economic Council, former member of the Federal Reserve Board of Governors, as many of you know. She has joined us before. But this will be her first time in her role as Director of the National Economic Council. She'll be followed by Mark Zandi, Chief Economist at Moody's Analytics on July 11th. That particular event will be a webinar. And then we move forward to July 13th where we have another webinar and that will feature Andrew Liveris, the former Chair and CEO of Dow Chemical talking about his new book, *Leading Through Disruption: A Change Makers Guide to the 21st Century*. And on July 27th as part of our Diversity Equity and Inclusion Series, we're going to be hosting Jesse Van Tol, the President and CEO of the National Community Reinvestment Coalition. And that will also be a webinar.

So please be sure to check the Club's website and emails as we are confirming more

speakers both in person and virtual this summer and we'll, in early July be getting out the calendar for the Fall, where we're confirming some exciting speakers, actually already.

And as always, we'd like to recognize those of our 362 members of the Centennial Society joining us today as they're contributions continue to provide the financial backbone of support for what we do at the Club.

So, thank you, everyone, for joining us today. I was pleased to see we almost got to 100, which is great. And Karen, just a wonderful conversation. Many, many insights and Reshma, as always, thank you for a terrific interview.

So, everybody have a great rest of the week. Thank you.