Exchanges at Goldman Sachs Navigating the new geopolitical and technology landscape Jared Cohen, President, Global Affairs; Co-head, Office of Applied Innovation, Goldman Sachs George Lee, Co-head, Office of Applied Innovation, Goldman Sachs Allison Nathan, Host, Goldman Sachs Research Recorded: March 2, 2023

Allison Nathan: In an era of geopolitical instability and economic uncertainty, what are the implications for companies and investors?

George Lee: The emergence of geopolitical swing states I think cause companies and boards to have to think in a more tactical way. New countries will emerge as kingmakers. And so knowing where to place your chips, where to make your bets, how to align yourself has just become far more complicated.

Allison Nathan: I'm Allison Nathan, and this is Exchanges at Goldman Sachs.

To help make sense of the opportunities and risks in an increasingly geopolitical environment, I'm sitting down with Jared Cohen and George Lee, who are the co-heads of Goldman Sachs's newly created Office of Applied Innovation. Jared and George work with the firm's clients to explore issues that sit at the center of a changing global marketplace, shifts in the geopolitical landscape, and rapidly evolving technology. Jared, George, welcome to the podcast.

- Jared Cohen: Thank you.
- **George Lee:** Great to be here. Thank you.

Allison Nathan: Jared, let's start with you. So in addition to this role in the Office of Applied Innovation, you are the president of global affairs at the firm. It feels like geopolitical issues and tensions are particularly complicated today. So give us some context. Is that really the case? Or do we just feel that way because we're living it every day?

Jared Cohen:So the first thing that I would say isthe creation of a role as president of global affairs is an

acknowledgment of just how significant and at least medium, likely long term, all of this geopolitical uncertainty is. We're probably in a moment right now where the geopolitical uncertainty is at a two-decade high. I think it will get worse for longer. But the undercurrent of all of this is a larger question about what's happening with globalization.

And I think some of this is the era of hyper globalization probably ended well before COVID, but it took the war in Europe, it took these tensions with the US and China for there to be this realization that, even for the winners of this last chapter of globalization, they're not all together thrilled with how it's panned out, where you have countries like the US, China, to some extent Russia, who each have something differentiated that the rest of the world wants and needs and they've all taken geopolitical advantage of it.

So whether that's the US with its privileged position of the dollar. Russia with gas and food. China with a high concentration of the world's supply chains. And as this plays out, there's not an individual country or an international organization that has proven able to arbitrate that. **Allison Nathan:** So what are the implications of all of this for the balance of power in the world?

Jared Cohen: If you look at this next chapter of globalization, the competition between great powers is going to continue to play out, but competing is going to require them to court and thwart other countries that are highly relevant in this competition. So there's this new category that I would describe as geopolitical swing states. They're going to have a unique amount of agency over the next ten years.

And so I would put these countries in three categories, broadly speaking. One is countries that have a disproportionate amount of capital that they're willing to deploy throughout the world. So that's countries like Norway, Singapore, some of the wealthy Gulf states. Countries that have a differentiated amount of something in the supply chain that the rest of the world wants. And that can be India with pharmaceuticals and low-cost labor. It can be Indonesia with nickel, Brazil with agricultural goods, the Gulf states with energy and food nutrients. Or it can be countries that have proven able to make themselves attractive for near shoring, offshoring, and fringe shoring, and that's countries like Mexico and Vietnam.

And so these countries are going to benefit from this strategy of multi alignment. It's not going to be in their interest to go all in with one great power or another. It's just a very interesting shift in the geopolitical environment.

Allison Nathan: So much to unpack there, but before we get into that, you also spend a lot of time with clients analyzing these geopolitical trends. What's top of mind for clients when it comes to these types of issues?

Jared Cohen: So I think one of the big macro trends that I would observe that is causing a lot of consternation in the boardroom and leading to a lot of questions and concerns from different clients that we talk to is it used to be the case that the economic interests of countries were driving the geopolitics. And now the challenge you have is the geopolitics are driving a lot of the economic interests, particularly among the great powers.

And so you think about how many different types of businesses are impacted by seismic shifts in the supply chain. If you think about the types of businesses that are concerned about getting caught in the crossfire of a geopolitical tension between countries that they don't have a lot of agency to influence, right? So there's very few companies that I've encountered in my seven months here that aren't to at least some extent impacted by the geopolitics.

So all of a sudden, understanding where the geopolitics is going, the second- and third-order effects of these geopolitical tensions is absolutely essential to forecasting how somebody needs to run a business. And it's not just reflexive and defensive and reactive to some of these trends. There's a lot of shift going on.

So if we're going to see an unprecedented reorientation of the supply chain over the next ten years, there's a lot of opportunity that comes with that as well. So we're seeing companies wanting to understand the new centers of economic gravity.

Allison Nathan: And many of the geopolitical issues and tensions that we are dealing with today, whether that's competitive positioning or national security related issues,

they revolve around technology. And part of your role at Goldman is to look at precisely that, that intersection between geopolitics and technology. So talk a little bit more about that intersection and what you're most focused on. Maybe, George, you can start off.

George Lee: Sure. We've seen advances in technology sufficient enough to really influence the human experience and therefore exercise a very profound effect on geopolitics. And so I agree with you. I think it's a primary factor guiding the evolution along the lines that Jared just described in the world. And I really put it in three categories.

There's fundamental enabling technologies. Think things like semiconductors and 5G, etc. And those have really become consequential to national interests and national competitiveness. And that's I think foremost in the minds of geopolitical thinkers.

Second, you've got new communication channels emerging. So you think about WhatsApp, TikTok, YouTube, etc. That's actually shown itself to be influential in matters of national sovereignty and the way that democratic processes work inside countries.

And then finally, you've got disruptive tools emerging fast and furious. So things like artificial intelligence, blockchain, AR, VR, etc. And those I think promise very consequential, if not tectonic, effect on countries and companies and people.

Allison Nathan: So we are always focused on the prospect of technological disruption. Given these few areas of technology that you just discussed, George, how do you assess the state of technological disruption today?

George Lee: I think, first of all, it is just a common inexorable feature of our world, is the technology building upon each successive platform of prior innovation to do new things. The effect of that concatenation of platform builds is that it feels like change is happening at an accelerating rate in our world. And that's probably most evident today in the startling advances in artificial intelligence that we're seeing.

They're keyed generally to an invasion that emerged really in around 2017 that people refer to as either generative AI, and it leverages these things called large language models. And they are a different approach towards driving innovation with artificial intelligence that is both I think profound in its effect, but it's also unique in that it's touching lots of consumers in a prima facie way.

So one of the weird features of AI in the past is it was pervasive around us, but we didn't necessarily see it or interact with it. It came in the form of our Netflix recommendations or whatever. Now, we are actually able to be an interlocutor with ChatGPT, which is an access point to a large language model. And so that kind of prima facie experience of this different type of intelligence that's emerged in our world I think is fascinating, and it's driving forward an enormous amount of innovation. And it's causing people, companies, and countries to think about what is the influence and impact of this technology and the speed at which it's improving.

Allison Nathan: So Jared, given everything that George just said, put it into geopolitical context for us. If we're entering a new chapter of globalization, what does this technological innovation and disruption really mean?

Jared Cohen: To put it in a geopolitical context, we talk a lot about this competition between the US and China. It's important to remember it's an asymmetric competition. The two countries, they play by a different set of rules in the international system, and we often rely on these kind of buzzwords to give us the GPS coordinates of which technology we're talking about.

So we talk about AI and quantum computing and semiconductors. And I think the names of the technology or the umbrella terms that are used to describe that technology matter to me less than the attributes of technology that are at the center of this competition. So the way that I would think about it is why are certain types of technologies deemed critical in a geopolitical context?

The most obvious reason is that it has clear national security implications. A second reason is it's a type of technology that proves to be an accelerant. Meaning that, by having a dominant position in a particular type of technology, it makes it easier to build other technologies on top of it. Third is a technology represents a critical choke point in certain parts of the economy. And then the fourth attribute that I would cite is technology that represents an area with a significant competitive mode. Meaning to have an advantage in that technology gets you leaps and bounds ahead in other fields.

So I think if we focus on the "why" as opposed to the "what," it helps us understand why creation technologies are at the center of this competition. I think that's particularly important as these terms that have become all too familiar to more and more people increasingly sound like catchalls for everything. And I think to understand the geopolitical implications of this, we need to be specific about which types of technology. And I think that's absolutely essential as well so that we don't find ourselves in this situation of marching towards this idea of a total decoupling, which is not in either country's interest. I don't think it's feasible anyway.

The narrower the focus on where the competition is most active, the better for the global economy, the better for the bilateral relationship between two countries that, while complicated, still have their economies deeply intertwined.

Allison Nathan: And George, what do you think?

George Lee: One of the fascinating elements of this is there's a bit of an impedance mismatch between the worlds of technology and government. Government is slow moving, deliberate, in some ways brittle by design. And technology, as we talked about earlier, is experiencing this accelerating growth curve. And rationalizing those two things I think is extremely difficult and will really result in interesting geopolitical affiliations and alignments because these technologies can emerge so fast and end up in a certain industry structure or geographic structure or supply chain structure that has geopolitical implications, much like semiconductors have, before you know it.

And with the rise of AI and some of these other new technologies, I think this can present real challenges for governments. Both there's the desire and the instinct to be leaders in each of these areas, but defining that leadership, understanding how to partner, not cell dividing innovations along regional or country lines. It's going to be really interesting times ahead.

Allison Nathan: And if you think about that, though, that's been an ongoing challenge, right? Governments always seem to be a bit behind. So do we expect that to

change? Jared, do you see some solution or way forward that would not just be more of the same?

Jared Cohen: So to me, one of the biggest problems that we have in terms of how government approaches this is there's plenty of preexisting frameworks for governments to do the multilateral thing around defense, around a known set of geopolitical, political, and economic problems and opportunities that persist in the physical world. We haven't really seen governments figure out how to do multilateralism in the technology sense. There's a lot of experimentation, but for starters it's not geographically determined in the same way. It has less to do necessarily even with how powerful a country is militarily, economically. We see very small countries with small economies punching way above their weight because of their technological prowess.

And then the other aspect is this isn't the Cold War. As you look at the fault lines in the technology competition that we see persisting in the geopolitical arena, one side's not going to win and the other side's not going to lose. It's going to continue to be a competitive coexistence. And by the way, when I travel around the world and visit different countries, you see very few instances where a country says, "We're going to go with the China model," or, "We're going to go with the US model." What I hear more from countries is, "Look, technology is the language of efficiency. Our country wants to be more efficient. And we prefer to build a technological ecosystem within our sovereign borders that represents a cocktail of the most efficient technologies. And whether those come partly from China, partly from the US, other countries that are not necessarily dominant players, as long as it makes our country more efficient, that's what we want."

The reason this is important from a multilateral perspective is a lot of multilateral architectures right now are constructed based on governance model. But in a world where Chinese technology and US technology are existing in a technological architecture for different countries, we need to figure out a way for different technological systems to interact with each other such that countries' interests are protected.

So this is one of the sort of areas of great complexity. And I just don't think we're anywhere close to the right

multilateral vision for navigating this.

Allison Nathan: But are there some countries that are doing a better job than others? Or are there some that are really should be viewed as role models in the way forward?

George Lee: Well, it's interesting. You have countries, like, where necessity is the mother of invention, like Ukraine in its advancing military technology in the moment as a matter of continuing their very existence. And so it's interesting to see growth and development and new ideas there.

You've got small countries, like Jared mentioned, Estonia, who's been incredibly progressive on creating a digitally oriented society. One I'm personally very inspired by is India, which is the home to an enormous amount of technology expertise and software development expertise. They as a country have developed a stack of digital tools that are fundamentally enabling for their people that I think is quite a remarkable national undertaking and I think will have accelerating effects for that country.

So you're definitely starting to see this idea of countries

with very strong national interests and national policy around technology. And the question Jared poses, which is a great one, is, unlike other spheres of geopolitical action, there aren't bodies to necessarily arbitrate and coordinate that in the way that we might hope.

Allison Nathan: And Jared, what do you think?

Jared Cohen: One of the areas where this is going to have to play out on the multilateral front, if you're talking about multilateral payments, ecosystems, and ecosystems for digital currencies and electronic payments, you need countries to be interoperable with each other. Countries are going to want to protect their interests, particularly as it pertains to governance models. So the democratic ecosystem of countries is going to have a very strong opinion about what multilateral architectures look like in this space.

So we're seeing a situation where the technology is evolving faster than the political architecture can keep up with. And we're also seeing a lot of countries look inward as opposed to multilaterally. It's very similar to this sort of reflexive reaction that we saw in the early stages of COVID where countries didn't rise to the multilateral moment in those early stages. They looked inward. And I think the same thing is happening with regards to this type of technology as it pertains to the changes in the way money and value moves around the world. Central banks are reflecting on their countries' policies. And meanwhile, the technology is being built without borders in mind. So that's the tension that I think is going to play out over the next five to seven years.

George Lee: Yeah. Totally agree with that. And when you look at the world, the handful of sand that could be thrown in the gears around that is this very issue that Jared's describing, which is countries pursuing unitary national policies, not coordinating. One example of this is people talk about the splinternet. Taking that common central platform that's been so enabling for the world, breaking it into nationally bounded versions of the Internet, and how that will suboptimize efficiency.

And you can imagine a lot of these other technology things that require standards and platforms and cooperation to really thrive and dominate will be challenged if we splinter all of these initiatives. **Allison Nathan:** What I'm hearing from both of you is essentially we need multilateralism to be able to leverage these technologies effectively, and yet we are in a chapter of globalization where we are potentially trenching from that. So that probably raises more questions than answers.

George Lee: But in part, that's one of the reasons why I think the work we're doing together is so interesting. You pointed out almost the core thesis of what we're talking about, which is the coexistence of a new geopolitical framework being established in the world at a time when technology is more important than ever to geopolitics and it's changing faster than ever. That mix actually makes the advice and perspective that Jared can garner and we can deliver to clients I think really useful.

Jared Cohen:Certainly in my life, I've never seenthe hyper focus on geopolitics and the hyper focus ontechnology happen simultaneously at the same velocity,both in an integrated way and separate ways.

George Lee: Yeah, yeah.

Jared Cohen: So people are as interested in kind of the isolated questions of what's going to happen in the Taiwan Strait as they are in the nature of the tech competition between the US and China. People are as interested in how the war in Ukraine is going to play out over the next year as they are nervous about the long-term implications for cybersecurity that comes out of just a daily barrage of sophisticated cyber attacks being tested and retested and experimented in an active military theater.

Allison Nathan: So given all of that, what is some tangible advice for companies and I would say investors that are grappling with all of these big questions?

Jared Cohen: One piece of advice is always around the way in which you look around the corner, right? So the reason why George and I are talking about these geopolitical swing states is we think that the competition between the US and China, again, it's going to sustain for longer. So we're focused a lot on what are the second- and third-order effects of that? And one of the interesting things is the rise of these geopolitical swing states gives a sense of where there's going to be new economic activity, where there's going to be political centrality.

We're spending a lot of time thinking about what we describe as geo commercial opportunities. If you look at the global economy through a geopolitical lens, different cross-geography and cross-sector opportunities to do business that wouldn't have previously been obvious, you see movement of supply chains in a way that also creates interesting new opportunities.

And I think the part that is also the most interesting is the combination of the geopolitical analysis with what businesses are seeing happen, whether it's in their supply chains or just economically or commercially. That's a one plus one equals three phenomenon. And I actually think the business community has an enormous amount of geopolitical knowledge and expertise that can be reverse engineered just from the anomalies and the trends that they're seeing in their day-to-day business.

And similarly, all the people focused on geopolitics have an enormous amount of commercial and economic insight that's being left on the table. So one of the things that George and I are trying to do is to merge the geopolitical and the commercial conversations in a way that yields interesting insights and therefore interesting commercial opportunities.

Allison Nathan: Can you just give us a quick example of a geo commercial opportunity that you've come across, given all this analysis?

Jared Cohen: If you go back to some of the big trends that I mentioned, right? So you're seeing countries that previously were very regionally focused. So let's take the Middle East as an example. These countries spent the last 20 years in a global war on terror framework. When I talk to the Gulf countries, which are obviously critical because of the amount of capital that they have, there's no shortage of businesses that are showing up in Riyadh, Abu Dhabi, and Doha on a pretty regular basis.

I've been traveling to the region for 20 years, and all I've heard is, "We want our economic interests to drive the geopolitics and not the other way around." So they're now coming out of the global war on terror paradigm, and it's shifted towards this new era where, if you look at the places of geopolitical instability, it's not in the Middle East anymore.

You have a war in Europe, and you have tensions between the world's two largest economies. And so the Middle East is looking at this world, and they're looking at a close relationship they have with the United States and a close relationship that they have with China. And they're saying, "We're finally in the situation where our economic interests can drive the geopolitics, and we want to reintroduce ourselves to the world."

And what that means is they're no longer just a place where people come for capital, right? They're increasingly deploying their capital into geographies that we previously hadn't seen before. They have deep expertise in sectors as broad as physical infrastructure, digital infrastructure, life sciences, commodities obviously, and a number of others. And so when you talk to these countries about some of their geopolitical ambitions, it opens the door to a whole new pipeline of ways that you can work together that are broader in terms of sector and geography.

George Lee: One thing I would add to that is you can't underestimate that large multinational companies

have benefited a lot in the last 20 or 30 years by a certain very predictable polarity of the way that the world worked in terms of who's exerting national leadership. There are various well-established camps out there. You have the central motive thrust of the power of globalization which unified and helped glaze over some of that polarity.

And the state of multilateralism, the emergence of geopolitical swing states, which Jared described, I think cause companies and boards to have to think in a more tactical way. You can't have a regional strategy. You actually have a very eccentric and particular country-bycountry strategy.

New countries will emerge as kingmakers and as geopolitical swing states will be geo commercial and commercial swing states. And so knowing where to place your chips, where to make your bets, how to align yourself has just become far more complicated than for 20/30 years. And so I think that's really a lot of the help that we can provide is trying to give a roadmap for that, some mental models of how to think about such that companies can make their bets in a more intelligent and perhaps even more hedged way. **Allison Nathan:** Let's grab onto that and talk just a little bit about this new group that you all are co-heading and just the genesis of it. I think a lot of the content we've already discussed speaks to that. But why now? And what are you mostly focused on as you talk to clients and governments around the world?

Jared Cohen: Given all the geopolitical volatility and given the impact it has on just about every business that we work with, I think that clients rightfully expect us to have an opinion about this and offer differentiated insights on this. So what our office is doing is looking for generative ways to grapple with these questions together in partnership with our clients.

So we have business relationships with them. What we want to do is add an intellectual partnership with them on top of that around the geopolitics. And we believe those two things will reinforce each other.

The second piece is that we're seeing a fundamental change in how technology is moving money and value around the world. And this is an instance where the technology is moving faster than the applied use cases can catch up with. But it also represents another interesting shift, which is this is technology that has profound implications for the regulated economy.

And before I was at Goldman, I come from the unregulated world where the model of: "Here's a pain point and inefficiency in the world. Let's build a technology, break stuff, launch, iterate, we'll figure out the business later." And that's worked really well to disrupt a bunch of businesses and a lot of different verticals in the unregulated economy. But if you're talking about pain points and inefficiencies in the regulated part of the economy, George and I have a thesis that the sequence of innovation needs to be reversed.

And all these things that we have at Goldman Sachs as an incumbent -- the controls, the regulatory infrastructure, the legal and compliance infrastructure, the deep expertise on financial services, the relationships with regulators in different parts of the global economy, the responsible steward role that we play in the global economy. So our aspiration is to leverage what we have at the firm, which is this deep expertise and externalize it in a way that marries with some of these technological developments that are happening outside of the firm.

Allison Nathan: Can I just ask, why do we call it applied innovation? I think that's an interesting name, especially given so much of the content is really geopolitical in nature. So is there a story behind that?

Jared Cohen: Innovation, we believe, is a bit of a loaded term. It gets oftentimes overly conflated with technology. For us, innovation is a story of differentiation. And the reason we say "applied innovation" is we believe there's a lot of expertise that Goldman Sachs has on the geopolitics just by virtue of the breadth of clients that we coverage and places that we operate. We also believe that we have an enormous amount of expertise on the current ways that money and value move around the world, and we want to basically differentiate the firm by applying all the things that we have expertise on to expertise and capacity that exists outside of the firm.

And so we think that annotation of "applied" attached to "innovation" is a more actionable way to think about differentiation, which would otherwise just be thought leadership.

George Lee: Yeah, it's a great way of saying it. I mean, there are a lot of smart people in the world thinking big thoughts and writing and speculating about some of the topics. I think our difference is A) to apply it in a way that has commercial impact for our clients and influences the course of their decision making. And also the innovations that we drive forward are nested in and formed by and driven by those real-world insights of running a business.

My former job at the firm was being co-chief information officer. So understanding what it means to run engineering, resources at scale, etc. And that's what we hope to be some of the differentiating dimensions of the offering.

Allison Nathan: Jared, George, thanks so much for joining us and sharing your insights on this new office for Goldman Sachs.

George Lee: Thanks for having us today. It was fun.

Jared Cohen:

Thank you.

Allison Nathan: And before we go, I want to share news about a new podcast that Goldman Sachs is launching. It's called The Markets from Goldman Sachs. Every Friday, we break down the key issues driving markets that week. Make sure you're following and listening to The Markets for unmissable market analysis. It's the sharpest way to stay ahead. Available wherever you listen to your podcasts.

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