Exchanges at Goldman Sachs
How 3 retail CEOs are navigating
today's economic landscape
Corie Barry, Chief Executive Officer, Best Buy
Javier Quiñones, Chief Executive Officer and
Chief Sustainability Officer, IKEA U.S.
William C. Rhodes III, Chairman, President,
Chief Executive Officer, AutoZone
Vishaal Rana, Managing Director, Cross
Markets Consumer Retail Group, Goldman
Sachs Investment Banking
Allison Nathan, Host, Goldman Sachs Research
Recorded: January 30, 2023

Allison Nathan: How are retailers navigating an environment of slowing consumer demand, high interest rates, and rising prices? In this special episode of Exchanges at Goldman Sachs, my colleague Vishaal Rana, from our investment banking's consumer retail group, recently spoke with the CEOs of Best Buy, IKEA, and AutoZone at the Retail Leaders Association CEO Forum in Palm Beach, Florida.

They shared their perspectives on the trends shaping the retail landscape and how they're navigating economic uncertainties. We hope you enjoy it.

Vishaal Rana: Welcome to a special edition of Exchanges at Goldman Sachs. I'm Vishaal Rana, a managing director in the cross-markets consumer retail group in investment banking at Goldman Sachs and your host for today's episode. Today, I'm delighted to be speaking with the CEOs of three major retailers for their take on the retail landscape: Bill Rhodes, CEO of AutoZone; Corie Barry, CEO of Best Buy; and Javier Quinones, CEO of IKEA.

And one quick programming note before we get started. I'd like to acknowledge that Best Buy and AutoZone are both in their quiet period, and we will be careful in our conversation to avoid the disclosure of any material nonpublic information. Thank you all for being here.

So let's start with a macro question. 2023 looks to be a challenging year given still high inflation and interest rates and a slowing economy that could tip into recession. And

as the CEOs of three major retailers, how have the macro headwinds so far affected consumer demand and behavior in each of your sectors?

Javier Quinones: I think during the last three years, we have learned to really navigate in these uncertainties. What we have seen, especially in our industry, in the home furnishing sector, it's a massive change in behavior. We can say today that the home is playing a total key different role in people's life. And that has been clear since the pandemic. When we started, the home was really more on the functional side, so we were selling more many desks. And then people decided to then abandon some of the projects they had.

Then what will happen in 2023 I'm not so sure we can answer it right now. We're doing pretty good. I think it's also because of all the accelerations we have been doing during the pandemic.

**Corie Barry:** I feel like everyone wants one word to describe where the consumer is. And I think what you're going to hear across all three of us is there is no one way to

describe the consumer. If I could say anything, I think we definitely see a normalization of behaviors from consumers after a couple years of very elevated and unusual behavior.

And then, you know, when you add in inflation, which in real terms, whether or not it's improving, is incredibly high and it's incredibly high on the basics. It's high on food. It's high on fuel. It's high on housing. It's high on rent still. And so while everything might be slightly moderating, when it's high on the basics, every customer is going to be making trade-offs.

And it isn't equal across every industry or every customer segment. I think in consumer electronics -- though again a different industry -- we're definitely seeing a consumer who is making discrete choices. It's not as simple as everyone trading down. No, not everyone is. In fact, some people are trading up and we're selling as much premium as we were pre-pandemic. It's just the choices within there about whether or not someone's buying auto parts or electronics, those are the trade-offs that are happening right now with consumers that we see.

**Bill Rhodes:** Well, Vishaal, as you know all too well, our sector retail usually performs different than most other sectors or retail. Ours is much more failure and maintenance related than discretionary. And so typically, in tougher economic times, our industry performs really well.

I say often the best four periods in the last 30 years in the automotive retail are '93-94, '01-02, '09, 10, and 11, and COVID. I used to always say that we do really well in recessionary periods. Now I say we do really well in economic shocks because that's how I throw the COVID period in there.

It's too early to see recession or not yet. And whenever these economic shocks begin, it's interesting to watch customer behavior. As you know, we compete in two different channels -- a do-it-yourself channel or retail and a do-it-for-me or commercial channel. We believe we see some people trading down on certain things to doing it themselves. And we also see some trade down in our retail business in the lower good, better, best offerings.

Vishaal Rana: So why don't I stick with you, Bill. Then I'll come back to Corie and Javi. On auto sales, two questions. Auto sales, new auto sales didn't have a good year in 2022. And then electric vehicles have clearly accelerated as well. How do those two topics impact your business? It sounds like new auto sales may not, but I'm curious how you think about that.

**Bill Rhodes:** New auto sales impact us a little bit seven or eight years from now when that group of automobiles come into the cycle. If you look at the average age of a vehicle in the United States today, it's 12.2 years. It basically goes up a tenth or so every year or two. So those little short-term changes aren't going to significantly impact us.

On EVs, it, too, is a small portion of the car part today. So it's around 1% of the car part. But the growth is accelerating, and I think this year, 2022, the growth was higher than most people expected it to be. That's a long-term trend that we're staying very close to, and we'll follow the consumer wherever they go. But it's such a small part and such a new part of the car parts. They're all so new

that we're learning along the way.

**Vishaal Rana:** So Corie, on consumer electronics, it's interesting you brought up whether or not something is important or a staple to somebody, this necessity. Define that a little bit.

**Corie Barry:** I often ask people to think about which of their consumer electronics feel discretionary. A phone? Learning from home or learning at school? Everyone has an iPad or a computer. You have to have your fridge. You have to have your washer and dryer.

Now, the timing by which you might upgrade or improve those things, that might be discretionary. The items in and of themselves, I would argue, are so far from discretionary now. And so what we're staying anchored on as a team is, in the moment, again, people might be making trade-off decisions. But there will come a time when a much larger install base of consumer electronics than we've ever seen. More TVs, more cooking at home, more gaming, more small appliances. That install base will be upgradable.

And when you think about it, we're nearing a point now where you're three years out on the pandemic, and the average computer life is about four years. Our whole goal right now is to think about, okay, so as we move through this period and people start to think creatively about, all right, now what can my electronics do for me? And by the way, there hasn't been a ton of innovation because on the CE side, everyone's been working so hard to produce as much as possible and use every chip for the mandatory.

You also have an interesting innovation cycle that's coming our way. And so now we're using this time and our team talks about it as doubling down on the future of retail for consumer elecs. It's a very different business. Our digital penetration more than doubled versus pre-pandemic. But still, 40% of that is picked up in our stores. Even with all the same-day, next-day, people want that high price point, sometimes breakable item in their hands.

And so everything we're building behind the scenes is anchored on what we call omnichannel retailing, which is where we want it. We're going to help get it not just to you but help you use it. **Vishaal Rana:** So a couple things. Javi, 2021, obviously a lot of home purchases. But 2022, IKEA had a terrific year. Interest rates have been in the news a lot and mortgage rates have gone up. How does that impact the way you think about the future?

**Javier Quinones:** Well, to the first question, I cannot agree more with Corie actually. And I think for companies like IKEA that we have really a brick-and-mortar retailers, right? That we needed to transform to an omnichannel retailer.

COVID has actually been forcing us to transform much faster, right? And we have been doing that investment since the beginning of the pandemic. I still remember probably one of the toughest moments in my career when we had to close all the stores due to COVID. All the volume moved online. And to be honest, I don't think we were ready for a moment like this.

Today, we have more than doubled our sales online. And I'm sure hopefully it will not happen, but we are much

better prepared than before. So I think one of the secrets you will say is exactly this transformation, the acceleration

We also see this thing that, despite an increase in commerce, the fulfillment stems mainly in the lot from our existing units. And that's part of this transformation and one of the keys for the success.

Vishaal Rana: Excellent. The next topic is supply chain. And we're two and a half years from the beginning of the pandemic, and so this year marks a return to some sort of new normal for supply chains globally. How have you guys made changes to manage your supply chains? Where do you see continued evolution there? Bill, I'll start with you.

**Bill Rhodes:** Sure. Fortunately, before COVID, we had started a 2030 supply chain initiative. So we had already had a lot of things underway, looking very objectively and very boldly at our supply chain.

During COVID, our store volumes increased by more than 30%. So the average AutoZone store before COVID did

about 1.8 million. Now, it does about 2.4 million. And so that 30% increase in volume that, frankly, we didn't anticipate has really put a lot of stress on our internal supply chain and on our suppliers.

Then you add in all the COVID effects. So increased lead times more than double in most cases. Unpredictability on service levels from vendors. And playing a bit of whack-amole, you get this category under control and then all of a sudden this one pops. So it's been a very, very trying time for supply chains everywhere. I can only speak for ours, and I'm very proud of our team for kind of muscling through it.

But now we're, as you say, getting to the new normal. We got to get past muscling through it. So we've announced we're opening four new facilities. We had ten in the US and two in Mexico, one in Brazil. We're adding three in the United States as fast as we can. We just added a direct import facility on the West Coast. We're adding another distribution center on the West Coast and another distribution center with a direct import facility on the East Coast. And frankly, I was very proud of our organization

and our team because they envisioned some of this before and really were trying to modernize it.

The other big part of supply chain is global uncertainty. For years, there's been a big deflationary pressure on cost because of globalization. And in our case, in most cases, most of it was Asia and most of that was China. With some uncertainties in global markets around the world today, I think everybody is starting to think differently. I know we are.

We used to think about how do we make sure that we had ownership diversification of our suppliers in certain categories? So an ownership that made a decision going one direction, we had another option. Now, we have to think about not only ownership diversification but also geographic diversification because we can see what's going on with Ukraine and Russia. So we're having to think about our supply chain outside of the internal supply chain much differently than we did before.

**Corie Barry:** Our story is very similar to Bill's. I mean, I remember standing on stage with our investors

and analysts as CFO in 2017 and saying we are going to invest a disproportionate amount of capital in the supply chain, and the stock price went down by, like, 10 or 15%. And we were going to build it for scale, speed, and flexibility because we said the world was moving the next day at the very least. And lo and behold, suddenly, 90% of our total sales post COVID were being done digitally and shipped through our supply chains. So nothing in the stores. Those were closed. And 90% of it was going through digital channels. You only could do that by optimizing it this way.

I think the future of supply chain is now going to not just be about speed at all cost but about efficient optimization of the supply chain. It's not just about everyone needs it within an hour. And in consumer electronics in particular, that's not true. They want it when they want it, which is actually harder.

Now you need the science behind all of the nodes, whether it's shipped from store, whether it's same-day gig, whether it's next-day through FedEx. All those need to be optimized, and that's actually how you're going to find both

efficiency and effectiveness in the next realm.

And I think that's where tools like generative AI and some of the new tools coming out, that I believe personally will be the future of where we go from here.

Bill Rhodes: Can I jump in and ask a question about that? How are you guys thinking about -- because our cost structures on though various and sundry different choices, whether it's next-day through FedEx or whether it's ground or whatever the case may be, are you all doing a lot of work on trying to understand how to price according to those different channels? Because then the customer can make an informed decision.

In many cases today, we're making the decision for them, at least for us.

Corie Barry: That's exactly it. Right now we have a full data science team that's pointed at the all-in cost optimization depending on every different node of transportation that we have. And then it's going to be balancing where is the customer demand with what does

the fulfillment cost and model look like?

I mean, in our case, our large cube has grown exponentially through the pandemic. So a lot more 90-inch TVs. A lot more washers and dryers and fridges. That delivery model's a completely different cost optimization model than shopping AirPods out of an automated facility. And so to your point, the work of the team now is all around do we have the data and deep-level understanding? If I have to touch it three times to ship it from store, is that really most effective? Or do I need to have the most automated answer possible? And then ultimately, what will the customer bear in terms of their willingness to pay for convenience on their terms?

Vishaal Rana: You know, you referenced it, Corie, so I'm going to jump ahead to a question on digital transformation. Are we all soon going to have a virtual or an artificial experience in some form in shopping? When is that going to come? I would think, at a minimum, for both consumer electronics and home furnishings, there can be virtual realities that can enhance the shopping experience. Curious what you are seeing.

Corie Barry: I love how you finished the question, which is "How can you enhance the shopping experience?" And I think that differs monumentally depending on each customer's level of comfort. We segment our customers, like many. There are many that are very high touch, and so enhancing their shopping experience means I need to have a very experiential store where they can come in, touch, see all the bells and whistles.

I have another swath that is super comfortable with a more virtual experience. So we have built a complete virtual store. It doesn't have any doors. No one ever shops in it. But it's completely staffed by blue shirts and experts. And you can just go through online and pop in with a blue shirt. And then we've built technologies behind that so you can actually see what does it look like when you look through that camera's lens? And we can show you when you're virtually shopping.

I think all of us will find a multitude of different ways in which we can help. We also have a 5,000-square-foot store, which is tiny for us, that is all automated. And you

can use QR codes to get any of the product in the store.

I think what's harder, there will be no single answer. I don't think it's going to be like AR is going to work for everyone and that's going to solve how you sell consumer electronics. What's more difficult is you're actually going to, on multiple axes, have to create differentiated shopping experiences that will target different customers and the way they want to enhance their shopping experiences.

Now, I'm excited about that because there are so many digital tools you can use. We can help our associates sell better because they can see all the solutions in the palm of their hand. We can enable mobile checkout in our app if you just want to quick walk out of the store. We can have a safer store. You know, sometimes you have to lock product up in our case. We can now scan a quick QR code and you can go pick it up at the in-store pickup window within 2 minutes.

I mean, there's all these ways in which you can enhance the shopping experience. I think what's most important is we're trying a lot of things, and what I'm trying to help the team understand is it's not about what we love; it's about what the customer really loves. And I think sometimes we fall in love with what we want to love versus, really, what's the customer going to use?

**Vishaal Rana:** Anything in home furnishings in that? That seems like an area.

Javier Quinones: You know, I agree. I don't think we're going to see people in the store with headsets anytime soon, right? But it is true that this is about the customer and how we can meet the customer needs. And the thing is I don't think there is one customer experience that will fit everyone, right? And then there will be many different types of reaching the many people as we go.

In our case, and it is important for the home furnishing, is to create this safety. Many people do not know how to furnish the home. And if this would be -- it will work and it will be nice and it will be okay for me, right? So we are really trying to get into these things safely for people when they design their homes and their spaces.

We launched recently a tool that is called IKEA [UNINTEL]. It is actually an app. You can literally take a picture of your space. You can actually delete some of the products you have, your sofa, put another one, and then look in reality how it looks in your place. So we tried really to get close to people and to really make them feel safe.

Vishaal Rana: So I will flip to a little bit about your store footprint. There has been many years of discussion around the future of retail and the threat from large online competitors. All three of your concepts have thrived. So how do you think about your footprint and why it's important to your customer base and what might be there in the future for them?

Bill Rhodes: When you say that, it reminds me of a conversation that I had with Fred Smith, the founder of FedEx, back in 2016 or '17, when they were first ideating and we were working with them as kind of an alpha customer on this next-day delivery program. And he and I were sitting in his conference room, talking about it. And he said, "You know, how do we take your stores, where everybody today thinks that they're a liability and turn

them back into an asset?" And no truer words could have been said, and it couldn't have happened any faster.

I mean, 2016-17, everybody thought every brick-and-mortar retailer was going to go away. Well, first of all, we never thought that. So many of our customers need help. Then they need us to go out to their car. We go out, we got you, go out to the customer's automobile. Then we go out and we talk to the customer about if their "check engine" light is on. We have a code reader. We can go out there, put it in their car, bring it back inside, and say, "Look, there's an 87% chance that's your downstream O2 sensor. And there's a 12% chance it's your upstream. Another chance it's your fuel cap," whatever it is.

But we can get very specific. We can probably going to be a long time before we're going to be doing that digitally. But one of the things that we are working on on the digital front is how can we make sure and put our very valuable and technical resources in the store to work on the more difficult challenges and try to digitize or automate the less technical transactions?

And I just had this vision of there's a kiosk in the store. And a lot of people come into our store and they'll say, "Oh, it sounds like," or, "It smells like," or whatever the case, "It feels like." And going up to an AI, machine learning device, and saying, "Here's what I'm experiencing," and have that person or that system help them isolate the problem.

**Corie Barry:** Yeah, I get the question a lot: If you could recreate your footprint from the ground up, what would you do? And I kind of laugh and say, "Well, that would be much easier." The task we have in front of us is actually I think more exciting and interesting, and that is: How do you evolve it?

And so, again, with double the online penetration, as we saw just pre-pandemic, but 40-45% of that being picked up in stores, we've got to make all this work together. And so for me, it's less about, "Is it more nodes or less nodes?" I think it actually could be more nodes. I think they're going to do very different things. Highly experiential stores where I can touch and feel everything. Quicker, more convenience-oriented pick-up stores that might have everything in a warehouse but small selling square footage.

Very small automated 5,000-square-foot stores where I literally can just go in and scan and run. There may be even a store that really doesn't have any selling square footage and is a pick-up location where you can just get what it is that you want. A virtual store experience. In our case, an outlet experience where you can go get refurbished or open box consumer electronics products. And you do walk into a kiosk and say what generally are you trying to find here? And let us pinpoint it for you.

And so I think the future -- and this is one of the things that's most exciting for the teams -- is less ubiquitous experiences. Maybe even more physical experiences. But differentiating based on what a customer wants to actually do in the market and how they might want to experience Best Buy, which also means we have to re-train the customers, which is maybe the hardest part of all.

**Javier Quinones:** Sure. I personally think that the store is the best way to build your brand and the best way of positioning in the market. And I think the store has evolved, especially during the last three years. So they do

many more things than they were doing before.
Fulfillment, selling experiences, and much more than selling products these days.

[UNINTEL] I personally cannot imagine another place than a store to really get inspired. We will keep opening many more in different formats. So I think it's also evolving in the way they will look like in the future and how they will fill in the holes within this omnichannel, right? To build your brand but to be closer to what people need and to also use it as part of the fulfillment network.

**Vishaal Rana:** The last topic is sustainability, which has been a very important topic for many folks over the last few years. I'm curious how each of your businesses is integrating sustainability and what you do.

Javier Quinones: Yeah. I think sustainability is part of who we are. I remember I started 23 years ago in IKEA, and I did my first sustainability training is part of my introduction. So it's been part of who we are, and it's been part of our journey.

So in operations, we've been doing EVs. We have committed 2025 we're going to do all of our last mile with electric vehicles. It's happening right now in New York. We are moving to the rest. We own 240,000 solar panels throughout the country. We have invested in wind farms, solar farms, forestry, and it's part, again, as I said, of who we are.

We launched our program back in Brazil, which I'm extremely proud. And I think this is so important that we take care of the whole bio chain, right? And also from the beginning until the end of the product. And by the way, we don't make any profit on this. We just buy it from you, and we sell it to another person at the same price. So it's actually to make sure that we take care of the products from the beginning to the end.

**Corie Barry:** Like Javi, I think we think about this not just as something you do because it's the right thing to do but because we distinctly believe it's tied to long-term value creation for our company. I mean, there's really three main areas that we have worked. There are many, but if I broke it down, the first is sustainable operations.

We've pledged to be carbon neutral by 2040, and we know we're making progress. We've reduced carbon emissions 61% since our baseline in 2009. And we have a goal of 75% by 2030. So this isn't just a goal. This is hefty measurement that we're putting against it.

The second is sustainable products. We have a goal to help customers reduce their carbon emissions by 20% or \$5 billion on utility bills by 2030. And a lot of that has to do with Energy Star certified equipment that they buy. We've sold 56 million Energy Star certified products and that's since our baseline of 2017.

As a result, our customers have reduced their carbon emissions by the equivalent of removing 3 million cars off the road. And so it's kind of that backend of CE that people forget about is a massive consumer of electricity. And then we also have just a sustainable living category where people can actually buy products. So many products that are being developed in CE are aimed at either reducing carbon emissions or just reducing footprint. Even just charging of electric cars becomes something you think

about as a consumer electronics product in your home.

And then finally, we also have become really interested in the idea of the circular economy. Consumer electronic products are different. Like, I'm not going to tell you, "Don't worry. Don't send that back to us. Don't return it. Just throw it in a landfill." I can't do that. And so we have actually taken an active role in that. We keep products in the ecosystem as long as possible. Over two million products have found a second life through either trade-in, Geek Squad repair, or our Best Buy outlets since just 2021. And so we can keep pushing them back into the system.

And then we are also the nation's largest e-waste recycling program. We have recycled over 2 billion pounds since 2009 of equipment, and that's responsible recycling. We know where every one of those products are going.

I think what I love again is the team is kind of attacking on every single vector, and we're doing it in partnership with our customers, which feels like the most powerful combination for us. Bill Rhodes: I would say that we're earlier in our journey than these two, but we've been great stewards of the environment forever. Nobody recycles more motor oil in the United States than AutoZone. About 12 million gallons a year. If you think about many of the products that we sell, they're re-manufactured products. You guys are starting to talk about the circular economy. We've been doing it for hundreds of years.

If you buy a new re-manufactured starter, the core, we charge you for that. And then you bring your old one back, and we send it back to the manufacturer who remanufactures it. So there's a tremendous amount of very efficient environmental efforts that we've been doing for decades, if not longer.

But as far as the making the commitments, we just made commitments in November on being carbon neutral by 2050 and trying to be basically 50% of the way there by 2030. Lots of different things that we're doing. We just did a solar farm deal as well. We've been doing those for a long time, but we were not getting the carbon credits with them

because those carbon credits come with real cost. And I think that that's something that all of us as industry need to begin educating our shareholders on is we can do all these things, but some of these have real costs associated and real price tags associated with them.

So we're moving. We're excited about the progress we're making. We want to be great stewards of all of our different constituents -- the customer, the AutoZoner, the environment, the shareholder, and our communities. So that's our focus.

**Vishaal Rana:** Excellent. You guys are all visionaries in your respective sectors. Just the future of retail, next 15 or 20 years, why are you optimistic?

Javier Quinones: As I said in the beginning, difficult to predict if we just look back 10 years, we probably would not have predicted what's going to happen, right? So difficult to say. But I think we have been an industry that has shown so much resilience and adaptability, really getting close to what the customer and the consumer needs and giving answers and solutions to all of these. So

whatever happens, I think we will innovate, we will be here to create a better world in many ways because we employ, especially in the US, a lot of, a lot of people. So we influence many people. And I think we can actually, by doing what we do, change the world in various ways.

So whatever looks, I think it's on sustainability. I think it has to be on the people, taking care of everyone and really around the equality, diversity, and inclusion agenda. So I think we will take responsibility, we will innovate, and we will create a shopping experience that everyone wants.

Corie Barry: One of the things that I get a front seat to in the consumer electronics industry is exponential innovation. And what gives me so much hope, whether it's CE but it doesn't have to be, it's going to be in all of our industries, this idea of ongoing exponential innovation in service of consumers is not going away. We can see rolled up TVs that you'll take home like a poster on the horizon, right? You can currently monitor your baby's breathing and heart rate with a sock that'll alert you on your phone.

I mean, the way that large-scale companies are going to

continue to invest, to innovate, and disrupt our lives in a really, really good way, I don't see that stopping. Not in any of our industries. And so then the cool part is you've got companies that care about all their stakeholders, to Bill's point, that are really pushing the envelope on how to help consumers shop in the way they want.

And when those two things collide, I couldn't be more excited for the future of what all of us do in retail because it's not like the world's going to stop trying to incite people to go spend money on great things that'll make their lives better. And we're here to say we're going to keep changing in the way the customers want us to.

**Bill Rhodes:** We just sell auto parts. We're not monitoring babies' vital signs.

**Corie Barry:** But I really like cars.

**Bill Rhodes:** I think we're going to do what we've always done. At AutoZone, we have a cheer and a pledge. But everything we do says AutoZoners always put customers first. And if we continue to focus on where the

customer needs are, we're going to be fine.

I'm reminded of our first annual report in 1991, where the bare case on AutoZone's IPO was that the cars had become so difficult to work on that you had to be a certified male technician to take care of a car. And here we are over 30 years later, one, the word "male" has definitely been struck.

**Corie Barry:** Thank you.

Bill Rhodes: And more importantly, there's more DIY going on today than there ever has been because, not only has the car advanced, the tools and diagnostic capabilities have advanced maybe at a more rapid pace. And so if we'll keep the customer and their needs, wants, and desires at the forefront of everything we do, we'll be fine. And you can see the road has been littered with many retailers over the years that didn't keep the customer first and they went away.

**Vishaal Rana:** Well, on that note of customer-centricity, thank you, Bill, Corie, Javi, and thank you to everybody that's listening.

**Bill Rhodes:** Thank you, Vishaal. Great to be with you.

Allison Nathan: Thanks for listening to another episode of Exchanges at Goldman Sachs. This episode was recorded on Monday, January 30th, 2023. If you enjoyed this show, we hope you follow on your platform of choice and tune in next week for another episode. Make sure to share and leave a comment on Apple Podcasts, Spotify, Stitcher, Google, or wherever you listen to your podcasts.

And if you'd like to learn more, visit GS.com and sign up for Briefings, a weekly newsletter from Goldman Sachs about trends shaping markets, industries, and the global economy.

This transcript should not be copied, distributed, published, or reproduced, in whole or in part, or disclosed by any recipient to any other person. The information contained in this transcript does not constitute a recommendation from any Goldman Sachs entity to the recipient. Neither Goldman Sachs nor any of its affiliates makes any representation or warranty, express or implied, as to the accuracy or completeness of the statements or any information contained in this transcript and any liability therefor (including in respect of direct, indirect, or consequential loss or damage) are expressly disclaimed. The views expressed in this transcript are not necessarily those of Goldman Sachs, and Goldman Sachs is not providing any financial, economic, legal, accounting, or tax advice or recommendations in this transcript. In addition, the receipt of this transcript by any recipient is not to be taken as constituting the giving of investment advice by Goldman Sachs to that recipient, nor to constitute such person a client of any Goldman Sachs entity. This transcript is provided in conjunction with the associated video/audio content for convenience. The content of this transcript may differ from the associated video/audio, please consult the original content as the definitive source. Goldman Sachs is not responsible for any errors in the transcript.