Allison Nathan: Recession was the big fear heading into the new year. But the global growth outlook seems to be, if anything, improving. A dramatic reversal of China's COVID policies is leading to a sharp recovery in activity there. The boost from China and a warm winter in Europe is setting the stage for better growth in that region. And in the US, inflation continues to decline, even as the labor market remains robust. And that’s easing worries that the Fed will have to induce a recession to tame inflation.

But could this better growth outlook, in itself, reignite inflation concerns? I'm Allison Nathan and this is
Allison Nathan: On this special episode, we're breaking down a topic we hit on in our most recent Top of Mind report, now available on GS.com. We dig into the risks around an inflation resurgence. We first speak with Jan Hatzius, our head of global investment research and chief economist. He expects the US to avoid recession this year and growth to pick up in the second half. But he's not concerned that we'll reignite inflation. That's mainly because many sources of disinflation that he expects this year don't require substantial economic weakness to play out.

Jan Hatzius: We have the weakest US growth momentum in the near-term, a little bit below 1 percent in the first half, and then we're a little above 1 percent in the second half. And then approaching trend growth as we close out 2023, that's our baseline.

Allison Nathan: If we do expect a reacceleration in growth in the second half, why won't we see inflation picking up
Jan Hatzius: For one thing, if you look at the relationship between GDP and inflation or the output gap and inflation, typically you would look at the level rather than the growth rate, necessarily. So, if you see a faster growth rate, especially if it's a faster growth rate that still hasn't quite caught up with trend growth, the models wouldn't really tell you that should be more inflationary. That would be part of the answer.

The more important part of the answer though is that the sources of disinflation that we have in our forecast aren't really driven by large scale economic weakness. The drivers are normalization of post-pandemic, sources of upwards inflation pressure. I've called them 3Ds, basically drivers of disinflation that don't depend on real economic damage such as a big decline in commodity price inflation, healing of supply chains and the impact of that on durable good, and then the declaration in official measures of rent inflation. And we've seen a big declaration in rent inflation already in reality. And in some of the timely private sector measures we've gone from extremely rapid rent inflation in 2021, early 2022, to stagnation, maybe even some modest
declines. But the official CPI and BCE measures are still very strong. Close to 10 percent in an annual rate. And I have quite high confidence that those numbers are going to be coming down in the course of 2023.

**Allison Nathan:** We are expecting to see commodity prices rise alongside some of that acceleration, both in the US and beyond. So, won't that be an unwelcome reversal in the recent trend and potentially be inflationary?

**Jan Hatzius:** I think there are certainly some good reasons to expect higher commodity prices, which our commodity team has laid out. At a broad level, the lengthy period of under-investment in commodity industries have set the stage for this whole cycle. And then you've got some developments like the reopening in China that is probably going to boost demand and put upward pressure on commodity prices. So, they are building in significant increases in oil prices.

If those significant increases happen, I think that would probably reverse some of the progress in terms of the headline energy price components. But I think that when you look at year on year changes in prices, as opposed to
the level in prices, what they're projecting is basically getting back to an environment that we were in not that long ago. So, if you take, say, summer of 2023 versus summer of 2022, it wouldn't be a large amount of commodity inflation.

And the more important core measures of inflation are not going to be greatly impacted by an increase in oil prices. The [UNINTEL] tends to be relatively limited.

Allison Nathan: Hatzius concedes that some drivers of disinflation could prove transitory, but other bigger drivers likely won't.

Jan Hatzius: There are some areas of transitory disinflation or even transitory deflation. Commodity prices might be in that category depending on what happens. I do think that the supply chain improvements are probably going to put some very significant downward pressure on durable goods prices in the short-term. So, you're going to see durable goods or core goods CPI very meaningfully negative for a period of time. That's not going to last forever. Eventually, that will have played itself out. So, that's going to put some upward pressure on inflation.
But then there are other things that are slower to normalize. And I think rents are the most important. We haven't even started to see the slowdown there. There's a long way to go for rent [UNINTEL]. So, I think for 2023, at least, this is still going to be a source of very substantial disinflation.

**Allison Nathan:** We then speak to John Cochrane, senior fellow at Stanford University's Hoover Institution who has a very different view on what causes inflation and what it takes to tame it.

Cochrane believes that the influence of monetary policy on inflation is much weaker than most people think. And that fiscal policy matters more for inflation than it's given credit for.

**John Cochrane:** The influence of interest rates on inflation is a lot weaker than most people normally think, as far as I can tell. The Fed does not have complete control over inflation. One reason is, when the Fed raises interest rates, at best, that has a big effect on financial markets, but not obviously on average people. To the extent it affects
average people, the average business buying and selling, it's going to affect things that are dependent on interest rates. So, housing. You raise interest rates, mortgage rates go up. That's going to be bad for housing. But how does that affect how many people want to go out to dinner and restaurant prices?

The tool is to create a little bit of a recession in the interest sensitive parts of spending. Whereas we've got all spending going up high. So, that's a weakness.

Second weakness is how do you get from inducing a little bit of a recession, that's what the Fed does, it pushes us towards recession, how does that lower inflation? And inflation, remember, is all prices and wages going up, not just prices up relative to wages. Not just TVs relative to other things. How does inducing a little bit of a recession make all prices and wages go down?

Now, it seems sensible that it might. But it's not clear actually what that mechanism is. And as the Fed thinks about raising interest rates this time, it's going to run into headwinds from fiscal policy. Two ones that I think you have to keep in mind. The first is as it raises interest rates,
it raises interest costs on the debt. And that's a big effect now. With 100 percent debt to GDP, you raise the interest rates by one percentage point, that's about $250 billion of extra deficit. Too much deficit is how we got into this problem in the first place. A large sustained rise in real interest rates would cause the deficit, which is the thing that's causing inflation, to get worse.

Second one. As the Fed raises interest rates, it's going to cause a little bit of a recession. What does our government do in response to recession? Bail out. Stimulus. Again, we got into this one from the big, overdone fiscal policy of the pandemic era.

**Allison Nathan:** So, Cochrane believes that the pandemic era inflation owes not to the supply shocks we've heard so much about, but to the extraordinary fiscal stimulus injected into the economy.

Conventional wisdom is these are pandemic related supply shocks. And we look at core goods prices that went through the roof. We look at commodity prices that went through the roof. We can see real tangible evidence that that was inflationary and that's not subsiding. So, why don't you
give more weight to the supply side than the fiscal side, especially in this very unusual pandemic situation?

**John Cochrane:** Especially since in just about everything else I'm screaming how important the supply side is and how the Fed has ignored the supply side for years. And economic policy has ignored the supply side. And in fact, what inflation teaches us is how vitally important the supply side is.

We spent ten years saying, oh, we just need to spend more money. It's secular stagnation. We need more demand. We solved that problem just by throwing money at it. And oh, you know, all we need is to give people more money and the economy will grow. Bing. That's over.

The answer to every problem, throw money at it, is just simply over because we found that this is where the US economy can produce and produce no more. And it's surprisingly a whole lot less than we thought the US economy could produce. And if you want the US economy to produce more, throwing money at it is just going to cause more inflation. It's not going to produce more stuff.
In general economic policy, leaving aside inflation, we need a supply-side oriented policy. And that's about incentives. That's about getting the sand out of the gears. That's about letting people have the permits in less than 20 years. The whole point of inflation is the supply side matters and needs tending to.

Now, you're question though is more about does the inflation come from just supply shocks. And they can't get TVs through the Port in LA. Like, you couldn't. So, what's got to happen? The price of TVs is going to go up. Right? But that's the price of TVs relative to wages. So, any supply shock changes a relative price.

And it could be the price of the TVs go up. Or it could be wages go down. So, why is the price of everything going up? If it's a supply shock that we can't get enough TVs, then prices should go up relative to wages. But we shouldn't have both prices and wages going up.

So, all inflation is a mix of relative prices and everything going up at the same time. And the phenomenon of all prices going up and prices and wages, the part of it that's common to everything, that has to come from demand, if
you will, not just supply.

Now, I think of course what happens is the supply shocks come. And the government's response to it is to induce more demand because it doesn't want wages going down but prefers to see the prices of things going up and maybe wages going up not so much. That's how we adjust to things. This is going on in Europe right now. Energy prices go up. That certainly means inflation measured as energy prices goes up. But what did Europe do about it? It sent everybody checks so that they could pay the higher prices. Well, duh, that's how you get the price of everything going up.

And really, the true phenomenon of inflation is the level of all prices and wages, not the price of one thing relative to another.

**Allison Nathan:** Right. But don't they feed into each other? So, I think some people would argue you did have a labor supply shock. And wages have gone up. And then that feeds through too many parts of the economy that can't get a hold of labor. And so, there's this cycle that does push everything up together, even if it's supply shock
induced.

**Jan Hatzius**: So, the price of TVs go up. And then the workers say, "Well, TVs are more expensive. You've got to pay me more so I can afford to buy a TV." And then the restaurant says, "Wait, workers are demanding more wages. I've got to charge more for my goods from the restaurant prices." Then the restaurant prices go up. And people go to restaurants saying, "Wait a minute, I need more money to go--." We just ratchet ourselves up.

But if people don't have the money to pay those higher prices, it ends. We can't ratchet everything up because people don't have enough money to buy everything at the higher prices. And that's what slowly brings everything back down again. And without the overall force to validate the higher prices, without printing extra money to validate the higher prices, then you can't have that thing going on.

Fiscal policy matters for inflation more than we give it credit for. By fiscal policy, I mean that long run faith in ability to repay the debt.

**Allison Nathan**: Can you go over the mechanism about
why our debt problem and our deficit issue would generate inflation?

**John Cochrane:** So, what's the mechanism? The underlying mechanism when you strip away everything else and get the most basic, simple thing. If our government has issued more debt then people think it is reasonably going to repay, you're sitting on a bunch of treasuries, and you say, "Ah, this is not going to end well," what do you do about it? You try to sell them, right? Get out of treasuries. Move into other stuff. Into real assets. Into stocks. Real estate and so forth. Driving up those prices. And eventually, trying to buy stuff.

Well, too much debt chasing too few goods drives up inflation. So, it's like the old idea of too much money chasing too few goods drive up inflation. It's just that money and government debt are basically the same thing.

So, if there's more debt outstanding than people think the government is over the long, long run willing to repay, then they try to get rid of the debt and you cause inflation. The mechanism is just like stocks. We all understand stocks. If you think that the dividends aren't going to be there, we try
to sell our shares. As we try to sell our shares, the value of the stock goes down. Government debt works pretty much the same way.

**Allison Nathan:** Cochrane believes that people realistically, if not consciously, behave that way, spending rather than saving because they're worried that government bonds won't be a great long-term investment. He says the pandemic era stimulus is a good example of that.

**John Cochrane:** In the pandemic, the government sent people checks. You got a check, say, for $10,000. And you say, "Great, let's spend it." Now, let's think about it. Why did you decide to spend that as opposed to, "Great, here's $10,000. I'll start building my wealth for my long run." People made an interesting choice right there. They thought that this thing was worth spending, not saving.

There's newspaper article after newspaper article on how people aren't building wealth, how they're not saving for retirement and so forth. You've got a big chance, America. And you chose to go on a spending spree.
Now, you help me with the psychology. Why did they not take that $10,000 of brand new, freshly printed money and say, "Oh, this is a great asset to save for my retirement"? They said, "Let's buy something now." Well, they did. And I'm not a psychologist. But certainly something about this is not a great investment to sit on for a long time was involved in that.

**Allison Nathan:** Given this view, Cochrane doesn't worry much about the possibility of an inflation resurgence over the near term. He believes inflation will fall over the next couple of years as the fiscal shock that caused it fades away.

**John Cochrane:** The source of the inflation was a fiscal thing. It has to depend on where you think it came from. If you think it was just a supply shock, then the supply shock goes away, inflation goes away. Done. I think it was largely because of the $5 trillion worth of money sent out as checks. But that's a one-time thing. And what happens in that scenario is you cranked up the extra debt. People don't believe the government has the resources to pay that back. So, they try to spend it. And inflation goes up until we've inflated away the debt. That's already happened.
We're going to pay back that debt in money that's worth less. So, that source of inflation does fade away.

So, my cautious bet is inflation goes down to in the 3 to 4 percent range. And then something happens. And of course, when you think about inflation, what is actually going to happen is going to depend a lot on the next shock.

**Allison Nathan:** But longer term, Cochrane is very concerned about a resurgence in inflation given the US's unsustainable fiscal policy.

**John Cochrane:** Clearly we have unreformed spending in the US. We are borrowing that trillion bucks a year. We discovered the edge of the cliff with the big spending in the pandemic. My biggest worry is that the next shock will lead to another demand for 5 trillion. And then markets suddenly say, "We've had it." Then we're open to do spiral. If interest costs on the debt rise a lot and if we haven't really solved the long run entitlements, the long run spending problem, then we could have a very suddenly inflation.

**Allison Nathan:** Finally, we speak to David Rubenstein,
co-founder and co-chairman of The Carlyle Group, who served in the Carter Administration at a time of double digit inflation. He doesn't expect a resurgence in inflation so much as a period of higher inflation ahead.

**David Rubenstein:** For much of the 20th century, inflation in the United States was more or less around 3 percent. If you go back and look at standard economics textbooks of the 1950s and '60s, they talked about inflation as being more or less 3 percent as a normal.

When I worked in the White House, we got inflation up to double digit levels. In fact, we inherited high inflation. It was the famous Whip Inflation Now program WIN was actually started under President Ford because we had high inflation then. But we weren't able to whip inflation. And so, we had high inflation under the Carter years.

Paul Volcker was brought in to deal with it. And he had a massive effort to deal with inflation by dramatically increasing interest rates. To put it in context, over one weekend, he increased interest rates by 200 basis points, which would be a very big increase even today. And that had the effect of lowering inflation over time. But also
putting us into a recession. But as a result of what Paul Volcker began, and many other things that have gone on the last couple years, we've been used to inflation of 2 percent. We've had that more or less for 25 years. Not only because Paul Volcker helped to beat inflation, but also because China emerged onto the world scene and began producing products at very low cost that we imported into the United States.

In the 1960s and '70s, many of these products were produced in the United States at higher relative prices. So, with China producing lower priced goods, we more or less we're getting inflation down. And used to 2 percent.

Today, I would say, people are probably willing to accept 3 percent as acceptable given where we've been recently. And I suspect 3 percent will probably be the norm for some time. Trying to get to 2 percent and getting there quickly, you're going to almost certainly get a very high unemployment rate.

The Federal Reserve's principle job is to protect the currency and to deal with inflation. But the Fed is not insensitive to the unemployment impacts of what it does.
**Allison Nathan:** Given the recent difficult period for dealmaking in private markets, we also took the opportunity to ask Rubenstein about their outlook. He's optimistic that private market activity will pick up and valuations will rise in 2023.

**David Rubenstein:** In 2022, the difficulty was not so much that debt was unavailable for buy outs. Obviously, it's harder to get debt. But there are more sources of debt than there used to be. It used to be you had to go to commercial banks largely to get a lot of the debt. And other private equity firms that also have private credit businesses, and hedge funds that have private credit businesses. So, you can borrow from them readily as well.

But I think the biggest problem is this, when you don't know if you're going into a recession or not, it tends to freeze markets. So, if you own an asset right now and you want to sell it and it's worth $100, you say. Well, if somebody wants to buy it from you says, "We're going to go into recession. I will buy it from you for 90." And if you say, "No, I'm not selling it for less than its really worth. I don't think the economy is falling apart," you have a big gap
between what buyers who are afraid of buying into a recession, and with sellers who don't want to be seen as giving something away what they feel the value is.

So, I think as it becomes clearer that we're not going into a deep recession, and as interest rates increase or don't go up quite as much as they did in 2022, I suspect you'll see more and more deal activity. It's very unusual to have two straight years of very modest deal activity. Usually, they oscillate every year or so. And last year was a relatively modest year for deal activity. I suspect 2023 will be better.

**Allison Nathan:** There's so much focus on valuations. The valuation gap between private equity and the public markets. How do you think that gap might evolve?

**David Rubenstein:** When you look at public markets, they were down, depending on which index you used, between 20 and 30 percent in 2022. Private market marks probably were down, if at all, by 5 percent, maybe 10 percent in some cases. They weren't down as much. And how do you explain that?

Well, you can explain it a number of ways. Some people say
that the private firms are just not being tough enough on themselves or being realistic enough, and these marks should go down. As somebody who's participated in meetings to deal with valuations like this, I would say that many of the private equity firms have held up much better than maybe people would have thought. They tend to be very focused on the bottom line. They tend to be not as subject to oscillations. Maybe the marks are a little bit not as aggressive as some people would like. But I actually think the private marks that I've in the investment committees that I've been on, I don't think the marks are really off that much. In fact, based on what I now know, I suspect marks will probably be going up in 2023, not going down.

**Allison Nathan:** More broadly, Rubenstein thinks private markets will continue to out perform public markets, and that the golden age of private equity is far from over.

**David Rubenstein:** From the time I first got into the industry in 1987 when I helped to start Carlyle, people have said, "There's too much money in private equity. The prices we're paying are too high. The returns aren't going to be as great as people projected." They've been wrong almost
every year.

Overall, over the last 30 years or so, almost every year they've outperformed public market indexes, anywhere from 200 to 500 basis points on average. I suspect that will continue. And I suspect it will happen in part because the economic incentives are incredible. You get 20 percent of the profits on somebody else's money if you do well, above a prefer return in some cases. And as a result, I think people are highly motivated to do well. And they're very careful. So, I suspect marks will continue to outperform public market indexes.

But I also don't really worry that there's too much money chasing too few deals. Remember, two thirds of all the private equity deals are done in western Europe in the United States. You still have the largest part of the population in the world which has relatively modest penetration of private equity. I believe that China will begin to get more money. India is seeing a big inflow. I think there's a real interest, again, looking into Latin America, Africa, and particularly the Middle East. So, there are parts of the emerging markets that I think are going to get more and more private equity dollars and more and more people
looking at those areas.

**Allison Nathan:** With questions about how US inflation will evolve sure to remain in focus, we'll continue to keep a close eye on it from here.

I'll leave it there for now. If you enjoyed this show, we hope you follow on your platform of choice and tune in next week for another episode of Exchanges at Goldman Sachs.

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