

**Exchanges at Goldman Sachs:  
How Supply-Chain Disruptions Are Impacting Inflation**  
**Joseph Briggs, Global Investment Research and Host, Jake Siewert**

**Jake Siewert:** Welcome to our Exchanges at Goldman Sachs markets update for Friday, March 26th. Each week we check in with a leader across the firm to get a quick take on what they're watching in markets.

This week we're looking at global supply chains -- a topic that's much in the news -- and what the problems and issues there mean for producers, consumers, and the economy. I'm Jake Siewert, global head of corporate communications here at the firm. And today I'm delighted to be joined by Joseph Briggs, an economist at Goldman Sachs Research, who recently published a report looking at this topic specifically. Joseph, welcome to the program.

**Joseph Briggs:** It's great to be speaking with you today, Jake.

**Jake Siewert:** So, Joseph, the problems with global supply chains began pretty early in the pandemic when manufacturing facilities in China just shut down and we all went scrambling for some basic goods. A year later, the disruptions in supply chains are still wreaking havoc, but it's a little different. So help us understand the nature of the challenges facing supply chains and what's changed since the pandemic began.

**Joseph Briggs:** Yeah. We've really seen two distinct supply chain stories play out over the last year, Jake. The disruptions from last spring are pretty easy to understand since it's hard to get parts and inputs from factories in China that are completely shut down. The current disruptions are a bit more complicated and a bit more tied to the overall macro picture.

So last spring, a lot of manufacturers started to cut back on production because they expected that incomes and spending would fall the way that they typically do in a recession. Instead, the opposite happened. Incomes surged due to generous fiscal support, and spending on goods actually picked up quite a bit because households had money to spend but the normal consumer services that they would spend on were largely unavailable.

The good news about this surge in good demand is that it led to a quick recovery for the manufacturing sector. The bad news is that many manufacturers hadn't anticipated it. And so therefore

you they hadn't ordered enough inputs and parts to meet the rising demand. And getting inputs proved very difficult in the middle of a global pandemic.

Even when trade partners and international suppliers were able to produce the things that US manufacturers needed, getting them to the US was a problem because the virus was weighing on international shipping. The combination of high demand and limited supply for international shipping led to a shortage of containers and port congestion problems, particularly along the West Coast. This in turn led to lengthy shipping delays, which explain most of the current supply chain disruptions. Although other events like the winter storms in Texas and a ship getting stuck in the Suez Canal certainly haven't helped.

**Jake Siewert:** So give us a little bit of a sense of the scale of what's happened and how much it really matters.

**Joseph Briggs:** The most striking indication of just how problematic the supply chain disruptions currently are comes from measures of delays and supplier deliveries from some of the Federal Reserve's business surveys. These measures have actually spiked to their highest level in 40 years. Additionally, these same surveys show that a vast majority of manufacturing firms currently report that supply chain disruptions are complicating their production.

Additionally, in our report we also found it illuminating just to look at some of the more anecdotal reports that are covered in the popular press. We collected them all and organized them in a table, but we really found this exercise really highlighted just how widespread supply chain disruptions are with everything from cars and electronics to boats and roller skates being affected.

**Jake Siewert:** Not to mention bicycles. I'm going to share anecdotes. My local bike shop owner tracks his inventory now from Taiwan, which he never used to do before, but he's gotten much more savvy about the supply chain. How are the supply chain issues affecting consumers and, more broadly, the real economy?

**Joseph Briggs:** The main impact on consumers is that there will be some delays on receiving the goods that they order, like bikes, for example. My problem isn't bikes, but I do have a pair of winter gloves that I ordered in December that now I think should arrive just in time for summer. However, we think

that these anecdotes really just primarily reflect inconveniences and not real problems. Our outlook is that goods demand will remain pretty strong, particularly after the arrival of the latest round of stimulus checks.

We think that supply chain disruptions could have a slightly larger impact on some specific producers. For example, there's been reports about car makers having cut production due to the semiconductor shortages. However, we still think that most of these effects will be pretty modest.

Unlike last spring, most of the current supply chain disruptions reflect transportation and not production constraints. This means that a lot of manufacturers in the US are able to find workarounds. For example, we found some reports about importers moving ships to alternative ports. And others have turned to air rather than sea freight. That said, these workarounds are not really cheap, and we've seen prices increase by quite a bit along some of the more stressed trade routes. For example, shipping routes from East Asia have increased by about 300% over the last year.

**Jake Siewert:** Well, maybe you'll get to use those gloves somewhere in Greenland or Iceland this summer, somewhere cold. The higher cost associated with the shipping and transportation logistics are raising concerns about inflation. What's your view on the outlook for inflation because of these disruptions?

**Joseph Briggs:** So when producers encounter higher shipping and supply costs, they have two options. They can either absorb them, or they can pass them onto consumers. We think that a bit of both will happen, but we see several reasons why the ultimate impact on consumer prices will be much smaller than some of the, you know, crazy numbers that we've seen, for example, on the East Asia-US shipping routes.

First, most shipping costs outside of these really stressed trade routes haven't increased that much. For example, domestic shipping, which accounts for about three quarters of the total shipping cost for making a good in the United States, have only increased by 1.6%.

Second, shipping costs by themselves only reflect about 3% of the total cost of making a good. Given that both of these numbers are pretty small, it's probably not too surprising that we find a pretty small effect on consumer prices overall. We think that shipping costs are currently boosting year over year

core consumer prices by about 9 basis points. A notable but fairly limited increase.

Looking ahead, we think that elevated shipping rates will keep boosting consumer prices a bit for the rest of 2021 before becoming an outright drag in 2022. This primarily reflects that, as the economy reopens the middle of this year, we'll see some spending shift back from goods to services, which will alleviate some of the demand pressure that we've seen on durable goods.

We also expect that, as the rest of the world gets vaccinated, some of the trade routes will normalize and this will alleviate some of the constraints on international shipping.

**Jake Siewert:** All right. So let's talk a little bit more about inflation. Obviously inflation expectations are a big determinant of treasury yields and rates more broadly, which have been rising of late. If, as you say, supply chain issues start to abate, how will that affect the rates market?

**Joseph Briggs:** The recent rise in rates is partially explained by the markets pricing a firmer inflation path. And as we just mentioned, we do think that supply chain disruptions are boosting inflation a bit, but it's hard to explain current prices without allowing for some possibility of an overheating scenario that some commentators have been very concerned about.

It's certainly possible that we do see upward price pressure later this year from base effects and the combination of the different growth impulses that we think are really going to be driving the economy in 2021. However, we've been less concerned about the risk of persistent overheating mostly because the fiscal stimulus is one-off in nature, and a lot of these other things should fade pretty quickly in 2022.

We have a similar view on the impact of supply chain disruptions, which we think should alleviate some of the pressure on goods prices as they start to fade later this year. Now, we do expect the core goods inflation will remain pretty firm for the rest of 2021 and well into 2022, but this largely reflects higher upstream commodity prices and industrial good prices that aren't necessarily directly related to supply chain disruptions.

However, as supply constraints ease, this could lower the perceived risk of overheating, which might lower the inflation

risk premia that's currently contributing to market prices.

**Jake Siewert:** All right, Joseph, well, we'll keep an eye on the West Coast shipping ports. Thanks for joining us today.

**Joseph Briggs:** It was great speaking with you, Jake.

**Jake Siewert:** That concludes this episode of Exchanges at Goldman Sachs. Thanks for listening. And if you enjoyed this show, we hope you subscribe on Apple Podcasts and leave a rating or a comment. This podcast was recorded on Wednesday, March 24th, 2021.

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