## Resilience in the manufacturing industry

## Transcript

**JEREMY LEONARD:** Hi everyone, I'm Jeremy Leonard, managing director of global Industry Services at Oxford Economics, and I'm really pleased to be participating in this podcast about the future of manufacturing and some of the resilience that we need to grapple with as we move into a soft patch, because it's quite interesting: Manufacturing actually is in recession as we speak in the sense that it has shrunk since the middle of 2022.

It's clear that it's been quite a ride since the pandemic. We saw a massive increase in demand as people were locked down, demand for goods shot up, but we're starting to see a few changes. Those supply chain pressures that came in immediately following the pandemic, they eased, they tightened again. There's been a shift of spending to services and, all in all, there's been quite a lot of volatility in the market and I'd be interested in chatting with you, Bob, about your perspectives on this.

I mean clearly we have a situation of rising interest rates that's going to bring headwinds, but at the same time we've got easing supply chain pressures and it seems like things are just going up, down and sideways. And I'd just be interested in your perspectives on where you see the volatility going in the future.

ROBERT HERSH: Jeremy thank you, and it's a very good question, and I don't think that there's like a really clear-cut answer and I think that's what we're all struggling with. So if you look at some of the data that you just highlighted: manufacturing is in a recession, but the latest numbers show a slight uptick, right? And if you look at wages and salaries in manufacturing, they're also on an uptick.

Capital expenditures are sort of just kind of like hovering, so there's like all this kind of mixed mixed data, mixed perception. And so, the way I think I would distill it down is I think we're going to have sort of short-term headwinds say for the next quarter or two, maybe three. But if you look out farther than that, with some of the things that we're starting to see, I think you're going to see a stronger uptick in manufacturing activity in the out months. So, does that mean you know a soft landing like the fed's trying to engineer? I don't know. We might see a little bit more contraction, but I think all of the longer-term indicators actually point to a very positive story in my opinion.

JEREMY LEONARD: I think you raise a good point as well because one of the things that's true is you see a backlogs in manufacturing are still quite high in key sectors, particularly industrial machinery, even the automotive sector. So it's certainly going to the be the case, I would agree with you, that as we work through this soft patch of organic demand, the easing of the supply chain pressures themselves will actually stimulate the production that arguably should have happened late last year with these supply chain pressures. So, I'm totally with you that it's kind of misleading to look at what's happening with the broader economy because in manufacturing, where you do have these big swings and inventories, and we do know that there were problems sourcing components, that some of that demand that should have been in the second half of last year we're likely to see as we move on through this year, which could well mean that the recession in manufacturing may end up being shallower and earlier than for the economy as a whole.

ROBERT HERSH: Yeah, there are a couple things to add to that thought.

If you look at the PMI index, it's still showing contraction, but it's trending the right way. And I can't remember the exact numbers are but went from something like 47.1 last month to like 47.7 this month. Don't hold me to the exact numbers but it's something like that. So we're starting to see that trend come up. The other thing that I like to look at is the index of consumer sentiment.

And you know that showed a very strong reading in their last reading. So those are the types of things that I look at and see the stronger kind of performance in the outlines. So Jeremy, if you agree with that or not, but I'd look at your take on that as well.

JEREMY LEONARD: I think that's right. I actually wanted to talk a little bit about, kind of dig into, the supply chain issue because you know we know that manufacturers have really been having a tough time kind of thinking about externally, you know, sourcing inventory, controlling costs. I get the sense that there's a bit of a shift away from that into kind of internal operations and working on profitability because of the, obviously, we've had a lot of cost push inflation on the component side, so the margins have gotten squeezed. And so I'm just interested in your take, I mean my sense is that companies are starting to focus more kind of internally rather than focusing on the external supply chains, but would be interested in hearing your perspectives on that.

**ROBERT HERSH:** Yeah, and that's what I'm hearing from our clients. So, I've had a number of conversations with a few of the CEOs, CFOs of some of our clients and prospects.

And I think we're going to see that going forward. So I can kind of take a step back if you kind of think about where manufacturing has been over the last 20, 25, 30 years, right, we have focused as an industry a lot on our supply chain optimization. It generally has focused on the cost component of those supply chains. And I think what we're seeing with the geopolitical —

with the pandemic — the geopolitical uncertainty that we've got, the supply chain bottlenecks, it's exposed a lot of the rigidity and the inflexibility of those supply chains. And I think going forward we're going to see a movement from that cost. It's always going to be a big component, right, you've got focus on cost. But I think as we start reopening or redesigning our supply chain, there are going to be more variables that are considered in that optimization.

Now, in that same period of time, you pick the time 20, 25, 30 years. We have focused mostly, in my opinion, on outside the four walls of a factory or outside the operations of a manufacturing entity. And I think what we're going to see and again this has been confirmed with some of the CEOs I've talked to, we're going to see a renewed focus on operational efficiency and operational quality and dependability within those four walls.

So you're going to start seeing more of an application of technology and manufacturing capabilities inside those operational dimensions that, I'm not gonna say, they've been taken for granted, but they were sort of a second tier based on the globalization of a supply chain.

JEREMY LEONARD: Yeah, that's interesting. You said, and I wanna get on to sort of kind of thinking about productivity in a second, but one of the things you, because we're talking about resilience and geopolitical issues and it just occurred to me, we should probably think a little bit about some of the legislation that's come in to try to develop this supply chain resilience. So I'm thinking about things like the CHIPS Act even to an extent the Inflation Reduction Act to the extent that it's developing green energy, et cetera. I think it's been a long time since the US has really embarked on kind of what I would call industrial policy on this scale, but I think, even if we think about the outlook for manufacturing, certainly if we look at some of those things, if they are successful in attracting the kinds of industry that they are intending to, that could potentially be an upside risk. Certainly in the terms of semiconductors, we have had, there are several large manufacturers who have done groundbreaking at various plants. To what extent do you think that that is going to play a role in kind of strengthening manufacturing as we move ahead?

ROBERT HERSH: I think it's gonna play a huge role, very prominent role, like undeniably, right, something that needs to happen in line with the things we've just we've just talked about, right? So all that type of investment, all of that type of stimulus I think is very good for the industry as a whole. When you look at like semiconductors and what we're trying to do specifically there, I think that drives a lot of the rest of the manufacturing industries as well. So I think it's a strategic industry. We're putting the right focus on it. I think it's all a good thing. The thing that gives me pause, if it does give me pause, the thing that I worry about is it's a longer term type of play, right? It's not like we're going to have all this chip capacity online in the next year or two. All of those billions of dollars worth of investment that we're talking about, none of that's gonna come

online for at least four or five, six years, right. So we've got to take a longer world view, longer time horizon, planning horizon on these things.

JEREMY LEONARD: Yeah I think that's right. Let's come back to this question though about, sort of productivity and inside the walls. I think that also ties into workforce issues, which of course are a perennial issue for manufacturing, which have become accentuated since the pandemic. I mean, one of the things that strikes me about manufacturing is if you look at labor productivity over the past 15 or 20 years, it's basically been flat for the last decade after having risen steadily for the prior 15 years. Now interestingly, those ten years, as you mentioned, were a period of supply chain optimization. I think the reasons manufacturers were able to stay competitive in the broader perspective was because of that leaning out of supply chains, but if we think that there's more of a focus in the inside of those four walls, what do we think about sort of workforce issues, productivity? What's gonna be the next big thing that's going to power you, US manufacturing?

ROBERT HERSH: Yeah. So here's the I don't think it's gonna be any one thing that's gonna bump up productivity because I think that the issues are more complex than any one sort of information technology or automation. I think it's going to be a combination of things. Obviously the automation component is going to be a big player in that, but also, talking to some of the CEOs of our clients, when it comes to the sort of the bottleneck around labor and skill sets within manufacturing, they're actually turning to some low-tech options. There is one of our clients who has a diverse workforce, mostly Latino, and all the managers were English speaking. And so they've put in, this particular client has put in, a program where the supervisors are learning Spanish. The shop floor workers are learning English, and they're going through this journey together, and that has boosted retention, productivity, just overall job satisfaction, at this client of ours.

So I think you're gonna see investment and application of automation, whether that's better analytics, better computer systems, whether that's robotics, new operational capabilities, like additive manufacturing on shop floors, I think you're going to see all of that. But then I also think what's going to really boost productivity are some of these low-tech, let's focus on our workforce, make sure that we are providing fulfilling high quality career paths and work experiences for everyone in manufacturing, it's not just shop-floor workers, but it goes from the shop floor all the way up to the C-Suite.

**JEREMY LEONARD:** Yeah and I think on the workforce issue, it's quite interesting because in manufacturing, a manufacturing worker today is probably far from what people tend to think about in terms of a stereotype view of manufacturing. And I would argue that a lot of the jobs in manufacturing are very technical. They require a lot of skills, IT skills, and I'm just interested in your views because we've seen clearly, in other parts of the economy, in the tech sector for

instance, we're seeing quite a lot of layoffs of quite well-skilled people. What can we do to kind of attract them into manufacturing, which does kind of have a reputation as a kind of dirty greasy factory?

ROBERT HERSH: Yeah. So the way the way I try to talk about it is like manufacturing is not like your father or grandfather's manufacturing anymore. It's not the industry where dad got up at 3:00 in the morning, there was a lunch box sitting next to the door that mom packed the night before, and he went off to the factory, worked for 8 hours, worked his shift, after work went with his buddies for a shot and a beer and then came home for dinner. That's not what we're talking about anymore. Manufacturing is a technology, data-driven analytics, advanced capability, type of industry. So if you're thinking of, even like a Tesla, it's not just an auto manufacturer. It's a technology company. And that's where manufacturing is going. It's not just you work a day, make a car and go home. There's a lot of design, a lot of creativity, and it's a great application for a diverse workforce. And the more that the industry gets out there and shows that and demonstrates that the better off you're going to see the productivity numbers, the attractiveness to a broader workforce, is really going to help manufacturing. And I think we're starting to see that in the overall economy.

**JEREMY LEONARD:** Yeah, interesting point. We've said a lot here coming back to the theme, which is resilience, all the things we've said here, I'm wondering how you might sum up what is the most important thing or two that manufacturers can do to build their resilience right now?

ROBERT HERSH: Yeah, I think it's a really good question and not easily answered in you know, 10 words or less, right, so if you'll pin me down to say a couple of things. The things that I try to get our clients thinking about are like what's coming, right? What are the scenarios that might disrupt or affect their business, and how do they get out in front of them, right? So scenario planning, understanding how operational manufacturing technology might be changing, that they can apply to their supply chain or supply to their factory operations. You have to get out of that "This is the way we've done it for years" or "So busy I can't think of any other way except just move the parts. I don't have that sort of capacity." We've got to get out of that mode, think more broadly and try to think more creatively and try to get out in front as best we can. Now, you're never going to be able to predict it completely, but I think just the exercise of asking, in a very thoughtful way, what might happen and what do we need to do to be prepared for, it actually gets you prepared for a lot of different scenarios. Not the one specifically you might be talking about, if that makes sense, right — that sort of flexibility, dynamic thought process being able to be flexible in how you're thinking about your workforce, you're operations and your customers is I think the mindset that we need to move towards.

**JEREMY LEONARD:** Yeah, I I'd agree with that. I think it is just the contingency planning, the fact that we now understand that there are states of the world that we might have thought are

unimaginable, that actually happened in the last three or four years. If I think back to the decade before, China continues to be the world's manufacturer and it's kind of everything just trundles along as it is. I think the pandemic past four years have given a whole new meaning to contingency planning. So I think you're absolutely right.

**ROBERT HERSH:** Yeah. And that doesn't mean sort of like the annual plan or a multi-year strategy is going out the window. You still need to be thinking that way. But at the same time, in the short to medium term, we need to be doing this thoughtful scenario planning so that you're ready for contingencies. You're ready for those contingencies. They're going to happen, right.

**JEREMY LEONARD:** Yeah. Well, this is great. I really appreciate this conversation, Bob. And it's been a pleasure. And I hope the listeners have enjoyed what they've heard. Thank you.

ROBERT HERSH: Yeah. Likewise, Jeremy. Thank you so much. Take care.