

## Panel: An End to Pre-Pandemic Trends or Just a Temporary Interruption?

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*Jason Furman*

Thank you so much for having me here again at Jackson Hole and on this terrific topic. After dramatic events, it's very common to have quick takes that dramatically overstate the importance of that dramatic event over the longer term. In the wake of 9/11, it was very common for even somewhat intelligent people to say no one was ever going to get on an airplane again. In mid-March 2020, there was an idea that no one would ever live in cities ever again. And then, after the Cares Act passed, the idea that the pandemic had brought us together as a country and ended partisan polarization was at least written in some places.

In general, putting a lot more weight on whatever it is you thought before that dramatic event when thinking about the long term and placing relatively little weight on that dramatic event is the right way to think about the world. And it's the right way to think about the world for two reasons. One, there are a lot of deep structural reasons for much of what is out there. And two, it's just really confusing, as the discussion we just had about productivity shows, even if this did structurally change productivity. You can tell stories in either direction.

I'm going to try—not withstanding my admonition—to review the pre-pandemic trends and temporary interruption, and give you the

ratio of how much you should think about it as pre-pandemic vs. how much weight you should put on the new information and evidence on four different variables. I'll talk about all of them.

The first one is interest rates. And the answer there is put 99 percent weight on what you thought before the pandemic and 1 percent weight on what you've learned since then. The second is productivity: 96 percent weight on what you thought before the pandemic and 4 percent on what we've learned since then. The third is employment: 90 percent on the before and 10 percent after. And the final one is inflation. I would actually do 80 percent/20 percent. And I'm going to argue that might actually be a good thing, not a bad thing.

## **I. Interest Rates**

Let's start with interest rates. In the 1990 recession, the Federal Reserve (Fed) put pedal to the metal and did everything it could to make the economy recover. It did that by lowering interest rates all the way to 2.5 percent. Now, 2.5 percent is considered by some to be the neutral setting for rates. And the entire cycle we're in now is what tightening looks like in a low-interest-rate world. Most of the structural forces in terms of inequality, productivity, and demographics show that everything about that neutral rate is the same. When I said 1 percent new, that 1 percent new is the increment to debt we've had in dealing with the pandemic. That will put a little bit of upward pressure on the neutral rate, but only a little bit.

## **II. Productivity**

We should think about productivity differently depending on the time scale. I would love to see a data series of daily productivity growth. I think there would be no more exciting variable to look at, study, and think about. It would be entirely elastic. To a first approximation, employment is fixed. And if it's wonderful weather, everyone goes out and eats, and productivity goes way up. Restaurants are selling much more stuff with the same staff. And then the next day, it's bad weather. Productivity plummets because those people are sitting around the restaurant watching a bunch of empty tables.

In the long run—I think to a first approximation—we should think about productivity as inelastic to demand. You can tell a story that if

you add a lot of demand to the economy, it helps productivity. But it's not like if you had 10 percent of demand, the economy's going to happily accommodate that. By productivity going up 10 percent, you're mostly going to get inflation and maybe a tiny bit of extra productivity. Trying to understand where you are between the two of those can be quite tricky.

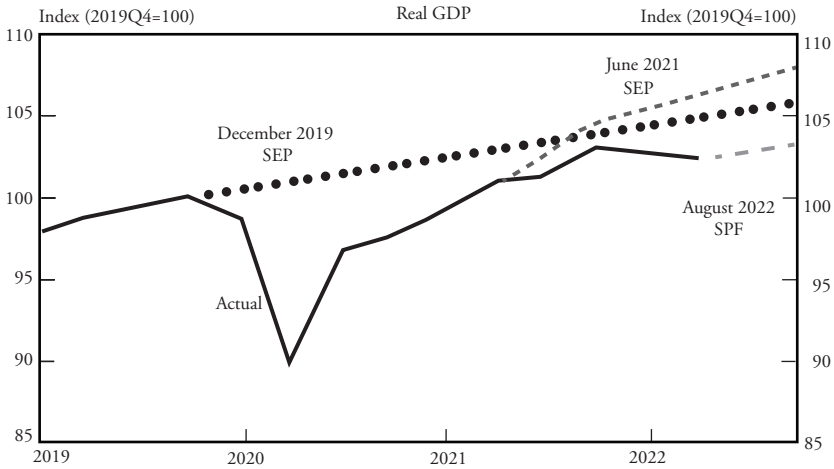
By looking at Chart 1—and this is a rude thing to do in this setting, to look at the June 2020 Summary of Economic Projections (SEP) forecast—I think part of what went wrong in that forecast was not knowing. And I think it was very unknowable and uncertain at the time. I don't think it was obvious in advance, but I think what is obvious in retrospect is how much of the way you thought about productivity should be that elastic, short-run view. It can be whatever you want to accommodate demand. Or in the long run, it is inelastic.

That forecast had this amazing property that gross domestic product (GDP) was expected by the end of 2022 to be even higher than it was projected to be prior to the pandemic. In fact, it was projected by the end of 2021 to be even higher than the pre-pandemic projection. So we went through this wrenching thing. We already knew about supply chain problems. We already knew about all the people who weren't working, the immigrants we didn't have, etc., and GDP was projected to be higher. Even more remarkable, that was projected to happen with an unemployment rate that was going to be higher than the level it was expected to be prior to the pandemic.

In Chart 2, the SEP doesn't show productivity growth. But I made up what I thought the median forecast for productivity growth might have been by just looking at the unemployment rate, what that's consistent with in terms of hours and labor force participation and the like. And roughly buried in this forecast essentially was a belief that productivity would follow that dotted gray line. So that big increase we had, the 2.5 percent above the pre-pandemic trend in the first half of 2021, the idea was basically that it would continue.

In some sense, the view was that the economy had a lot of demand and supply would expand automatically to fill that demand; and that we were in a world of that short-run productivity that's elastic.

**Chart 1**  
**Summary of Economic Projections, June 2020**



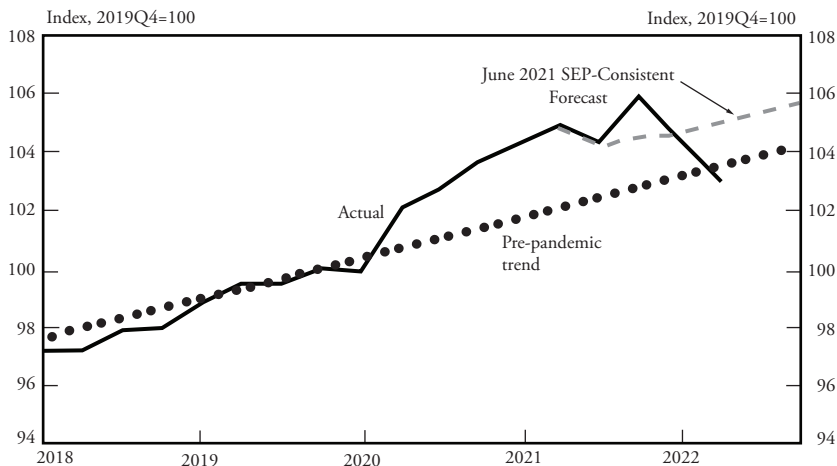
Note: SEP is FOMC Summary of Economic Projections. SPF is Survey of Professional Forecasters. Source: Board of Governors of the Federal Reserve System; Federal Reserve Bank of Philadelphia; Bureau of Economic Analysis via Macrobond; author's calculations.

Instead, it turned out we were in a world of the more long-run, inelastic productivity. Productivity growth fell by 5.2 percent. I should say my numbers here are my own numbers that adjust the Bureau of Labor Statistics (BLS) data for the difference between GDP and gross domestic income (GDI) using the mathematically correct weighting, which is 50/50.

Productivity has fallen 5.2 percent (annual rate) in the last two quarters. And now, it's almost right on the dot on the trend that it was on before. If you look at the official BLS numbers, it's still a little bit below the trend. If you believe GDI entirely, it's a little bit above the trend. I take what we have learned since the pandemic as mostly negative, not positive.

First of all, I think we are still in the temporarily elevated productivity phase of this cycle. Businesses had an enormous number of job openings in the second quarter. A lot of them were operating more short-handed than they wanted to be. And so they were a little bit like that restaurant, with fixed employment on the day when everyone walks in the door at the same time when productivity

**Chart 2**  
**Nonfarm Business Sector Labor Productivity**



Unemployment Rate

	2021Q4	2022Q4
December 2019 SEP	3.6	3.7
June 2021 SEP	4.5	3.8
August 2022 SPF	4.2	3.7

Note: Actual is adjusted using ratio of average GDP and GDI to GDP. Assumes GDI grew at same rate as GDP in 2022Q2. Pre-pandemic trend is average growth rate from 2007Q4 to 2019Q4 for official productivity.  
Source: Bureau of Labor Statistics and Bureau of Economic Analysis via Macrobond; Board of Governors of the Federal Reserve System; author's calculations.

temporarily goes up because lots of people are temporarily working much more intensively. I don't think the adjustment to a more normal workforce and workforce size has fully happened. I'd be willing to bet that over the next two quarters, productivity and the annual rate fall short of the pre-pandemic trend. So we fall below that line. I think in some ways, we're still masking some of what has happened with productivity.

Work from home is really puzzling to me. I'm a big believer in economic science. I think economic scientists are completely dispassionate, always accurate, know the truth. And anyone who's not an economic scientist is just making things up and shouldn't be believed. And if there's anyone that makes more things up and should be believed less than any, it is CEOs.

On work from home, the economic researchers are really excited about it. Some of them seemed excited about it even before they did their research. And then the research in turn came out to be excited, but they're scientists. Dispassionate, I'm sure. You had similar results in John Fernald's paper, which, as John pointed out, wasn't a causal impact of work from home. It's just what happened in that sector.

But certainly, the press read the Robert Gordon paper, which was written in parallel. By the way, in complement economic science, two papers written in parallel came up with pretty similar conclusions. The press read the Robert Gordon papers. Isn't work-from-home great? But every CEO I've talked to—and I haven't talked to Mark Zuckerberg, who I think has a different view on this—thinks work-from-home is just a disaster and hates it. The sooner it ends, the better.

And so I'm a little bit torn. I think I'm probably reluctantly and painfully a little bit more with the CEOs on this one than I am with economic research. I agree very much with Raghu's (Rajan) point, people have done studies of patent examiners where they switched to work-from-home—I don't know, 15 years ago or something like that—and found it was perfectly fine. But they're measuring how many patented applications you read per day or per month or whatever. That's not quite the same thing as sitting around in the office and figuring out a new way to change the way you read patents.

I also think there's a certain amount of coasting on innovation and ideas and originality that may have been developed in 2018 and 2019 that we're still using, but you're not replenishing that well at the same pace. So the combination of the productivity—adjusted for the fact that I think we still haven't worked through that temporary elastic phase—plus my skepticism on work from home makes me think that, if anything, you want to take the relatively weak productivity before all of this and adjust it down a little bit, not up.

### **III. Employment**

The third topic is employment. I have less to say about this beyond saying that the fact that labor force participation has continued to be disappointing and worsening over the last six months has gotten

me nervous that you should not overly exaggerate, as in the wake of 9/11-type phenomenon. It's now been two and a half years, COVID is still around, long COVID is real. The childcare problems that Heather (Boushey) was talking about before are very real.

But in a lot of ways, it's not obviously much worse in the month of July than it was at the beginning of this year. And you're seeing slower improvements there. Just looking at some of the early retirees that won't return, some people whose tastes and preferences may have changed and the like makes me put a bit more weight on the actual employment data we've seen and extrapolating it, at least over the medium term.

#### **IV. Inflation**

The final one was inflation. And here is where I think we should place a certain amount of weight on the experience we've just gone through in predicting inflation for the future. I think this makes it more likely that inflation on a 5- to 10-year horizon is higher than it was before. The markets don't agree with me on that, but I think it's true and I think it's actually good. I think 2 percent inflation was too low a target. I don't think anyone choosing a target from scratch in the year 2019 or the year 2022 would've picked a target of 2 percent, which gives so little room to respond to recessions by cutting the fed funds rate requires quantitative easing, which itself has bad side effects.

Ultimately, I think getting to a higher inflation goal would be better. Doing that will require national consensus. You don't want a world where the Fed's target shifts between 0 percent inflation and 4 percent inflation. You'd much rather have it always be 2 percent than that.

So will that happen? Three years ago, I would've thought the idea that the inflation target was going to change was an idea that was never going to escape from seminar rooms where people did papers on optimal inflation targets and the like. If we live with three, four, five years of 3 percent inflation, is the public going to start to become rationally inattentive again?

Are people going to calm down about inflation? Is the cost of getting inflation from 3 percent to 2 percent going to look incredibly high? Do the benefits of getting inflation from 3 percent to 2 percent look low and possibly even negative? And will, perhaps, the Central Bank of New Zealand take the lead in experimenting with a 3 percent inflation target and a year or two later, we can see how it worked out and consider shifting to it? So I'll put probability of 20 percent on something like that happening, but that's much higher than what I would've said before. In order for inflation to change, I should, first of all, say I don't think any of the theories of low inflation that people had before around globalization and technology and outsourcing and productivity, I don't think any of those made any sense at all.

You could have countries with high levels of globalization, with high rates of inflation, with low rates of inflation. You could have high or low productivity growth over the long run, and have high inflation or low inflation. I don't think there was anything remotely structural about the inflation rate that we had before this. That's why I don't think going forward you should think there's anything particularly structural about where inflation is.

I think it's built into expectations. It's what's built into policy rules. Ultimately, it is what the central banks want it to be. And I hope you all want it to be 2 percent firmly and loudly for some period of time. But then, when people stop paying attention, I won't view a declaration of victory at a stable 3 percent inflation rate as premature. I would actually view it as a good thing.

So I just would conclude all of this by saying, I think this long-run conversation, in some ways, is a really, really hard one to have. We literally have no idea whether in the first half of the year the economy grew or the economy contracted. GDP says one thing, GDI says the other thing. And one of the papers is trying to look 50 years ahead. So we do spend a lot of time in this day-to-day where the data right now is even more confusing than ever. I think one doesn't want to overstate any of the individual things in the moment, but I think there probably have been some changes. Some of those are out of our control, like whether work-from-home helps or hurts productivity.



And by the way, it might help welfare while hurting productivity. It could be that people will take lower wages in exchange from more flexibility. GDP doesn't go up by as much, but happiness does. Some of the factors, like work-from-home, are outside our control. Some of them, actually, are not structural facts about the world. The real interest rate is a structural fact about the world. The inflation rate and the nominal interest rate are not. Those are policy choices. And so, starting to think about how to make those policy choices would be a great thing to do now.