General Discussion: Reassessing Economic Constraints: Potential Output

Chair: Peter Blair Henry

Mr. Syverson: Super interesting, John (Fernald) and Jan (Eberly). Thanks so much. I've got three things, but I'll get through them quickly. One, because of the inherent noise in the productivity statistics, we're never going to know the trend broke until it broke a while ago. If you think about doing a power calculation, how many quarters would you need to see a differential change in productivity growth before you could reject it is the same as before? It's a lot of quarters and obviously, it depends on the size of the change. But the question to you, then, is if you had resources to throw at better productivity measurement, where would you put them?

Second, I agree with the cases John laid out for optimism and pessimism about future productivity growth trends. The question is what's the weight on each of those? I'm wondering if he has opinions on the weights or do they just balance out? There are some differential expected horizons that those would act over. We might be able to know as time goes forward, which ones are acting.

And then third, the data that you're using couldn't get at this, but you talked about between industry reallocation's effect on aggregate productivity growth, but within industry reallocation we know it matters a lot for industry and sectoral level productivity growth. And

COVID had potentially a lot of effects on this. We had programs to save firms from going out of business. That stifles the natural churn process that improves productivity. Did that happen, or did we actually save some capital that would've been otherwise destroyed? Wondering about your thoughts on that as well. Thank you.

Ms. Kalemli-Özcan: A great paper and very, very nice and interesting discussion. I would like to go back to the differences in the nature of the shock for making Global Financial Crisis (GFC) comparisons and the traditional way of how utilization and employment move, under financial crises, and traditionally it is all about demand shocks. And this is, of course, a demand and supply shock. Now, it becomes even more important when we also realize that these are at the sector level. We are talking about sectoral demand and supply shocks. It is a very important characteristic of this COVID crisis.

This is important in the sense that where are we going in the future? As Jan (Eberly) says, how do we measure slack in this world? How do we understand the labor supply shocks in different sectors? If you look at the U.S. pulse survey done after the COVID shock, of course, not in real-time, which is obviously a big problem (not to have this data in real-time), when they ask the question, "Why don't you go to work?" And 47 percent of the respondents say for pandemic-related reasons. Now, when you look at those answers in detail, you see that pandemic related reasons are being sick or taking care of somebody sick. They have long COVID or they are taking care of their children.

So if this continues this way, then how should we be thinking about these sector differences? What is this going to mean for the productivity trends? Thank you.

Ms. Forbes: Really interesting paper. I had two questions. First, I was wondering if you'd done this sort of breakdown for other countries. In particular, it would be very interesting to see if productivity evolved differently in countries that adopted different responses to COVID. For example, did European countries that relied more on furlough programs have a different productivity effect than the U.S., which relied more heavily on unemployment insurance.

Second, to continue your theme of side conversations, this difference between GDP (gross domestic product) and GDI (gross domestic income) is not just a data issue for economists to worry about. This has first-order importance for what happens to productivity growth. What is the historic evidence? Are there other periods when there was a divergence between GDP and GDI estimates of growth? If so, which came in as more accurate after all the time that Chad (Syverson) highlighted we're going to have to wait? And during recessions has this gap opened up before? If so ,which tends to be more accurate with the benefit of several years hindsight? Thank you.

Ms. Swonk: One of the things that I wanted to push back on a little bit is your thoughts on how these impulses over time are going to evolve. One of the things I've been working on with some of my former colleagues and new colleagues in HR consulting is worker engagement and how that affects productivity. Engagement has dropped dramatically. That tends to portend a major drop in productivity, whether it is in-person work on a retail floor—engaged workers sell more per person, even in a big-box discounter—to work from home. What does that mean for your results over time?

The other issue is mental health. Mental health was one of the key issues that workers reported they wanted their workplace to understand they were dealing with in their households. Yet HR professionals were saying that childcare was the number one issue and mental health didn't even rank. I'm wondering if you see mental health affecting labor force productivity going forward.

How we can think about what it means for people who need to care for people with mental health issues? What is the collateral damage for productivity of those issues and how does work from home exacerbate the mental health crisis we are enduring? Thank you.

Mr. Rajan: Just following on this, I wonder how much we are overstating the productivity from work from home. First, of course, we are running down social capital in firms. And that has to be reestablished—even if building social capital is not a high productivity activity in the short run, not doing it may have longer-run adverse consequences. The second is how much productivity was a result of

enforced stay at home. Essentially everybody's available to work at that point. And what happens when everything has opened up and somebody is at a parent-teachers meeting, somebody else is buying groceries and therefore you don't get joint production as effectively as when everybody is available? So that would change productivity measurements post-pandemic.

And the third is during the pandemic, there were no outside distractions. What happens when ball games are going on and you get the chance to actually see it in real time, rather than wait for a recording? So I just wonder if we are overstating how productive one can be going forward.

Mr. Henry: John, would you like to respond?

Mr. Fernald: Thank you. Obviously, there was a lot in those questions. I'm bound to miss some of them. Chad (Syverson), where would I want better data? Probably, I would put the emphasis on output at this point. We see the GDP-GDI differences today, but we also just have this more general issue with services. We've known this forever, right? There are NBER (National Bureau of Economic Research) volumes going back to the 1980s on the challenges of services deflators. And now the economy, as Jan highlighted, has become increasingly services oriented. We have a really hard time measuring services, specifically differentiating real and nominal.

On the future, I guess my optimism and pessimism kind of balance out. I know you're more optimistic that we're investing a lot today in the intangibles of learning about AI (artificial intelligence) and robotics. In terms of its productivity effects, I'm not sure whether that's going to be something that it might happen quickly or whether it might be that we're going to keep learning only gradually—so that it will contribute to ongoing gradual growth.

In the same way, in the 1990s people said, "the Internet will change everything," with a view that it would all happen overnight. Twenty-some years later, the Internet has, indeed, changed almost everything, but slowly. So we've seen the changes contribute to slow and gradual growth. So my presumption is that growth will stay like it is...until it changes.

Regarding reallocation, there's a question, of course, about whether the pandemic was a big reallocation shock or not. Barrero, Boom, and Davis said it's a reallocation shock that could be across industries. Our finding is that it's been less of an across-industry reallocation than we probably thought initially, because we saw huge initial reallocation but now we've reallocated back.

That said, it could be within industry rather than across industries Within industry, I don't know as much about the evidence. But as an example, we thought, okay, this is a permanent shift to shopping online. But then stores reopened and we shifted back to brick-and-mortar stores. The online share fell back. So I think that's still an open kind of question. Whether it's a good policy to try to keep businesses alive depends a lot on whether or not you think it's a permanent reallocation shock.

With respect to the nature of the shock, I emphasized that productivity looks like it did in the Great Recession. But the cyclicality of productivity is not a structural relationship, which is why up until about 1960 people thought, "Oh, productivity is surely countercyclical because of the diminishing marginal product of labor as well as labor composition effects." And then they got data and discovered it was procyclical. And it remained procyclical until the 1980s when it changed.

So it's interesting that the cyclicality was the same in the pandemic as in the Great Recession. Maybe the shock was, in a macro sense, more similar than one might have thought? But I think there are lots of open questions about what the labor force will be in the long run. Maybe it has reduced the fixed cost of working. Or maybe we'll have persistent effects from long COVID.

In terms of the sectoral pattern, we saw a big sectoral shift and then a sectoral shift back, on net. In the end, the productivity issues since 2019 have mostly been within industry.

To Kristen (Forbes) question regarding different countries, labor productivity initially went up in the U.K. and the euro area. I think in the U.K. it was an even a sharper reversal than in the U.S. But

in the U.K., even when labor productivity was going up, growth accounting TFP (total factor productivity) was going down. So the labor productivity growth was labor composition and capital deepening. We don't have the growth accounting for continental Europe.

In terms of which is more accurate, GDP or GDI, this has been debated at length. The BEA (Bureau of Economic Analysis) still views the expenditure side as more accurate. Jeremy Nalewaik, of course, argued that, especially around turning points, GDI was a better measure. For example, GDI is more correlated with what professional forecasters were predicting output would be and more correlated with changes in the stock market. But both of them would argue that there's information in both. So the debate would be, for example, do you want to put 40 percent on one and 60 percent in the other or the other way around? That's going to depend on relative bias and variance and such. Studies have reached different answers.

One thing I found, with co-authors, was that initially in the Great Recession, Okun's Law fit the GDI data a lot better than it fit GDP. With revisions, the fit with GDP came back on track. We'll see what happens this time. I'd been looking forward to the annual revisions of the national accounts, which historically have taken place in July. But then I discovered, "No they're doing the annual revisions in September this year." So in a month, hopefully, we'll get some more information.

Diane (Swonk), your points regarding engagement at work is incredibly interesting. In a sense, it's like saying, "Businesses have been doing less intangible investment in organizational capital." That would be consistent with firms having kept current production up, but perhaps at the expense of some future production because you're doing less intangible investment. And of, course, as Jan (Eberly) mentioned, the work-from-home intensive industries are highly intangible intensive industries, as well. On mental health and child-care, I don't really have anything much to say about that, other than I think those are incredibly important and interesting.

Raghuram (Rajan), yes, I am sympathetic with the view that we're running down social capital. Again, I guess this is a similar point to

Diane's. You're potentially doing less intangible investment in some of these important organizational issues. That could have broad implications. On fewer outside distractions early in the pandemic, we'll see. It's one of the many important and interesting aspects of the pandemic.

Mr. Henry: Jan, any you'd like to add?

Ms. Eberly: Let me add just a few things to John's comments. First, on Chad's question about where to put resources, my view, I think, was pretty clear: better measurement of services and in particular focusing on the utilization margins so that we have more direct measures of utilization rather than imputing them as we would in the production sectors. I would actually just take a slightly different angle on your question and think about a churn within industries. Pandemics and natural disasters of various kinds often suggest that we need different kinds of capital.

So for the pandemic, we may still have office buildings, but they need better ventilation. If we have different work arrangements, we need different arrangements within the buildings. The lesson from the 1970s is when our capital doesn't seem like a good match to the environment in which we are, it looks like a productivity decline.

Unless we get better measures of the capital that's being used, we may very well see a productivity decline when energy prices went up and we had the wrong capital in place. And lastly, I just want to group together Diane's question and Raghuram's because thinking about worker engagement, social capital and match capital come up in our search models. I think there's been actually a long-run trend in declining match capital or organizational capital, especially for some types of workers.

As we moved away from defined benefit pension programs to defined contribution plans, which have many positive attributes, but they lessen the connection between employer and employee; benefits have gone in the same direction. And probably the gig economy is the ultimate manifestation of that trend. And as more workers are working from home, do they feel more like their gig workers rather than having an attachment to their employer?

My one bit of optimism here is something I hadn't realized before looking at this data, which is the transition of more part-time workers into full-time jobs in work from home, which should increase their benefits and might actually improve some of these measures. But that's very early and very speculative.

Ms. Mann: So I was a little bit surprised, when in the comparison between the GFC and the pandemic, that no one mentioned the role of the financial sector or monetary policy. Because of course, out of the GFC and where we're going now are really different with respect to both the state of the financial sector and the conduct of monetary policy.

So could you speculate on the capital transition—whether it's work from home to business capital or match capital or whatever—and how this might change the dynamics of your story about productivity? Right now, the story is "Well, there's allocation differences." But top-line productivity has been unchanged through these two very dynamically different situations of GFC and COVID.

Mr. Gourinchas: I have a question that relates to Chart 7 in John's article that shows the link between the telework ability and the productivity growth or the excess pandemic productivity growth. And if I were to overlay on this graph, the wage growth that we've seen by industry seems to me that we've seen higher wage growth in those industries with lower telework ability. And also, therefore, according to the graph, lower productivity growth. And from a monetary policy perspective, I want to ask whether that's something that spells trouble, if we think that we have the highest wage growth in industries that have the lowest productivity growth.

Mr. Fernald: Yeah. So on the nature of the pandemic versus the Global Financial Crisis, I think one big issue is just the speed of the recovery. It was so much slower after the Great Recession. And you see that and how much slower it was for capital to get back, essentially, in line. Which meant how long it took for productivity to get back to its trend. It took a decade. This looks to have been much faster. And of course, in the Great Recession, you saw persistent capital growth being quite, quite low for a while, which would've held

down potential output growth, which you don't see now. And sometimes it bounced back surprisingly fast. And then it doesn't look like there was any loss of capital relative to trend. I'll just leave it at that in terms of monetary policy.

And wage growth by industry, I don't know how much is the industry dimension and how much is the occupational dimension that we should emphasize by education and such, which differ a lot in terms of age and experience or age and education across these industries. And that could be maybe the relevant one in a sense. A lot of lower education jobs disappeared and then came back. And then workers had reallocated and it was harder to find them, but I'll leave it at that.