

Richard Clarida's comments on Ben Bernanke & Olivier Blanchard's "What Caused the U.S. Pandemic-Era Inflation?"
May 23, 2023

In my 12 minutes, I'm going to do three things. First, because today's session will be primarily a U.S. focused discussion, I want to broaden the conversation to include some context for what is a post-pandemic surge in global inflation and the monetary policy response to it. Second, I will talk briefly about two rigorous counterfactual rate hike trajectories to the observed Fed lift-off in March 2022. And then third, I will actually discuss the paper, which I really enjoyed and learned a lot from.

The first thing to emphasize, which you all know, but that oftentimes gets forgotten in discussions of Fed policy, is that a persistent, sustained surge in core price inflation is a distinctive and distressing result of the post-pandemic global economy. It could be a coincidence, but I don't think so. So as an economist, when one sees cross country correlation one is encouraged to look for common factors. I can think of three. One common factor is clearly a decline in post-pandemic aggregate supply consistent with central bank inflation targets. More precisely, because of a shift in post-pandemic aggregate supply, the level of aggregate demand consistent with a given price inflation target is lower. Secondly, there was substantial fiscal and monetary policy support delivered during the first year of the pandemic. And this is true whether or not you look at the fiscal policy response, whether or not you look at cutting rates to the ELB, offering forward guidance, and expanding central bank balance sheets. Now there is actually more variation across countries in fiscal responses than in monetary policy responses. Every central bank, at least I'm talking about advanced economies, did some version of cutting rates to zero or to the effect of lower bound, doing substantial quantitative easing, and offering some form of forward guidance. Ex-post, the monetary-fiscal mix turned out to be too accommodative relative to post-pandemic aggregate supply, but according to critics in the case of the Fed, policy was ex-ante too accommodative, even relative to a pre-pandemic aggregate supply assumption. I would point out that as of June of 2021, the Fed's SEP projected that in 2021, GDP growth would be 7%. It came in at 5.7 percent, and this shortfall was certainly not due to insufficient demand! Correlation is not causation of course, but if one wants to look for correlations in the data, there's much more of a correlation between cross-country fiscal response to the pandemic and cross-country inflation than there is between cross-country growth in the monetary base and inflation.

Another common factor contributing to post pandemic global inflation is a large and persistent change in sectoral relative prices of goods versus services. Here, I'm not taking a stand on how much of the increase in the relative price of goods versus services reflects demand versus supply. If the equilibrium price of goods goes up for whatever reason, then the overall price level will go up, unless the central bank wants to engineer a decline in services prices. So if there is some nominal price rigidity in the service sector, the central bank has a choice: It either allows the relative price increase to pass through and take a one-time increase in the price level, or it raises rates and throws people out of work to reduce the price of services. And most central banks opted for accommodation, at least initially, of the increase in relative price of goods.

There is a saying the facts are stubborn things, and here are some facts about advanced economy post-pandemic inflation and central bank policy response. Number one, inflation in advanced economies is well above inflation targets now entering the third year of the reopening. Number two, core inflation in advanced economies remains well above inflation targets (except in Switzerland). No advanced economy central bank began to hike rates until headline inflation exceeded target, and almost all advanced economy central banks (save Switzerland and Norway) delayed rate hikes until core inflation exceeded target. Why this happened is obviously a very important and interesting question. and there's a nice recent paper by Paul Beaudry and coauthors that explores why many inflation-targeting central banks delayed liftoff until core inflation exceeded target. But if the documented inflation overshoots and the choices to fall behind the curve represent failures of monetary policy frameworks, they represent, at least in this episode, failures of both inflation targeting frameworks and its first cousin, the Fed's flexible average inflation targeting. But I don't think this is the case. I believe these ex-post errors were errors of tactics, not of strategy.

Turning now to the Fed, the Fed of course began to lift off in March of 2022. Given the magnitude of the U.S. inflation overshoot and its persistence, one is encouraged to think about counterfactuals scenarios in which the Fed would have lifted off sooner. But since coming up with counterfactuals can be either too easy or too hard, to put some discipline on this process, I'll look at two plausible counterfactuals. One is that the Fed in 2020 had just lifted off according to a standard inflation targeting Taylor type rule, such as is reported in the Monetary Policy Reports to Congress. With a Taylor type rule, when inflation is above target, the rule balances higher rates given higher inflation against the lower rates called for when unemployment is above the estimate of full employment. And in the case of the Fed, you really don't get

a lift off under the balanced approach Taylor type rule until the September 2021 Fed meeting. As an alternative counterfactual, if we look across the experience in other advanced economies, we see that the average gap between when core inflation moved above two and when the central bank began to hike rates was about six months, and so that counterfactual would also put lift off in roughly September of 2021. Interestingly enough, the threshold for guidance the Fed put forward in September of 2020 for lifting off - namely, that inflation's be at target and the labor market be, in the committee's judgment, at full employment - were met by December of 2021, just three months after the conditions for lift off with a standard Taylor type rule were satisfied.

In the U.S. data, underlying inflation as measured by the Dallas Fed trimmed mean inflation rate and wage inflation as measured by the change in the Atlanta Fed wage tracker both go parabolic at exactly the same time, which is the third quarter of 2021. Up to that point, if one came into the year 2021 with the prior that there was slack in the economy there is nothing in the incoming real time data to change that view in the data until the third quarter of 2021, at which time the level of GDP remained two percentage points below then estimates of potential, the unemployment rate was north of 5%, and prime age labor force participation was well below its pre-pandemic peak.

So finally, some thoughts on the Bernanke Blanchard paper itself! As Jason pointed out, most of the inflation overshoot in 2021 and early 2022 was attributed to food, energy shortages, and the residual. Maybe piggybacking a little bit off Jason's comments, I wonder if the residual picking up excess demand not captured by the V/U. In particular in theoretical models, V/U can reflect shocks to both supply and demand. Now fast forward to today. The residual is now small and if you squint at the last bar and in Q1 2023, it looks like in this model what I would call underlying inflation is around 4%, and that actually comports with other models that I look at. In terms of specification, I was reassured by the finding that during this period inflation expectations remained well anchored. That certainly is a policy success compared to the 1970s. One thing that's interesting about looking at long run inflation expectations data is in the last ten years or so, it is pretty mean reverting whether or not you look at Michigan surveys or other indicators, it's pretty mean reverting around a particular level. So given that the authors don't find a lot of pass-through in the long run inflation expectations version of the model, they might consider an alternative specification that treats long run inflation expectations as a constant.