

GMV – COVID-19 and the Missing Inflation Puzzle



July 30, 2020

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- The years leading up to COVID-19 saw persistently low inflation, ...
- something that came to be called by some the “missing inflation puzzle.”
- Rising unemployment and weak demand are now pushing inflation down, ...
- though low inflation does not mean that something is automatically “missing.”
- We update our Phillips curve core inflation regressions for the US and Euro zone.
- The drop in US core inflation is entirely explained by sharply higher unemployment.
- In contrast, persistently low Euro zone inflation looks like a “missing inflation puzzle,” ...
- given that the Euro zone labor market deterioration is so far comparatively benign.

The years leading up to COVID-19 were marked by persistently low inflation, something that came to be called the “missing inflation puzzle.” We have argued that low inflation needs to be seen in the context of key drivers, of which labor market and domestic demand dynamics are just one. The broad trade-weighted Dollar has risen 31 percent since end-2013, while oil prices have fallen 71 percent over the same period, forces that we have shown in past [work](#) exerted substantial downward pressure on core inflation. As such, we don’t see persistently low inflation as a “puzzle,” but as the inevitable outcome due to external shocks. COVID-19 is now drastically changing the inflation landscape. Core PCE inflation in the US is likely to fall to around 1.0 percent year-over-year in Q2 2020, down from 1.7 percent in Q1. Euro zone core inflation fell to 0.9 percent in Q2 2020, down from 1.1 percent in Q1. Against this backdrop, we update our Phillips curve regressions, which link core inflation to the unemployment gap and price moves in global currency and commodity markets. We find that the large drop in US core inflation is fully accounted for by sharply higher unemployment, while there looks to be a genuine puzzle in the Euro zone, given that the relatively benign labor market picture does not explain falling core inflation. In the big picture, the “missing inflation puzzle” continues to be in the Euro zone, not the US.

Exhibit 1. US core inflation is falling, ...

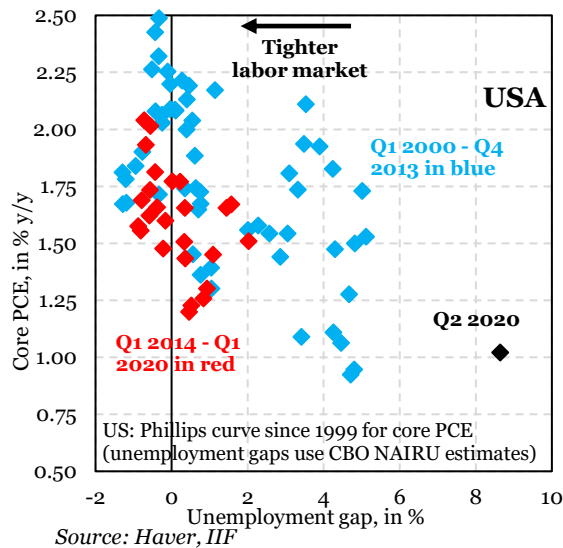
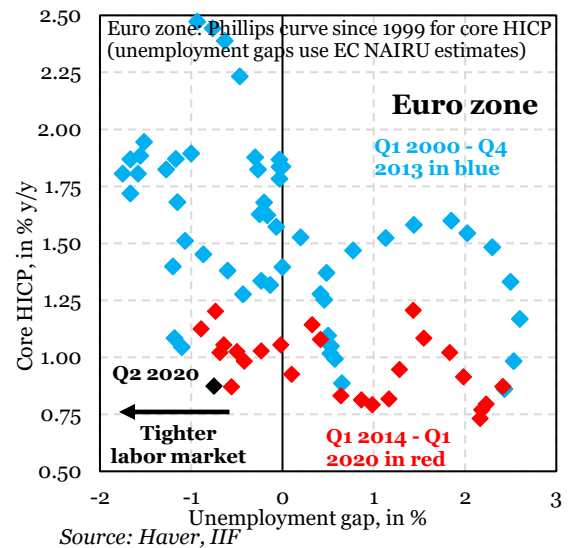


Exhibit 2. ... and it’s down in the Euro zone also.



The U-3 unemployment rate in the US rose to 13.0 percent on average in the second quarter, up from 3.8 percent in the first quarter. The resulting rise in labor market slack coincides with a sharp drop in core PCE inflation, which is likely to fall to around one percent in Q2 2020 (Exhibit 1). Core inflation in the Euro zone is also down, though labor market deterioration is less notable (Exhibit 2). Our Phillips curve regressions allow us to examine just how “abnormal” these inflation declines are, i.e. if there is “missing inflation.” Our unemployment gaps are based on NAIRU estimates by the Congressional Budget Office and European Commission and our regressions use quarterly data from Q1 2000 through Q2 2020. Exhibit 3 shows actual core PCE inflation for the US versus “fitted” inflation. Our regression explains 72 percent of the variation in core since 2000 and – notably – there does not look to be a “missing inflation puzzle,” i.e. core inflation is not systematically below the model “fit.” Exhibit 4 gives a decomposition of our “fitted” values into the underlying drivers, showing that the sharp fall in core inflation in Q2 is fully accounted for by the widening unemployment gap (blue). Other factors like falling oil prices (orange) and Dollar strength (red) also play a role, but are distant seconds to the labor market.

Exhibit 3. The US core inflation drop, ...

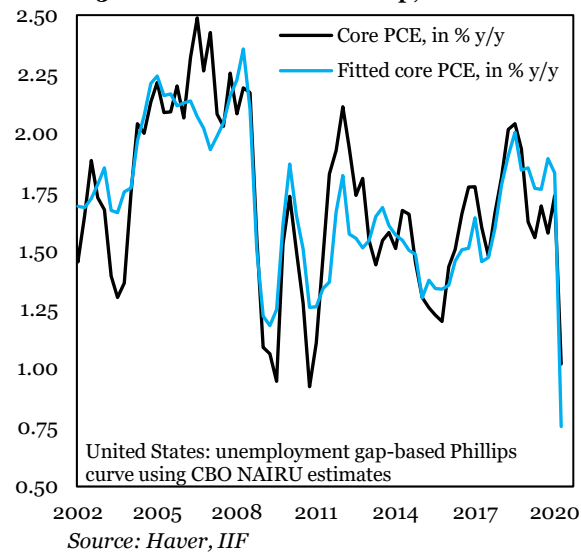
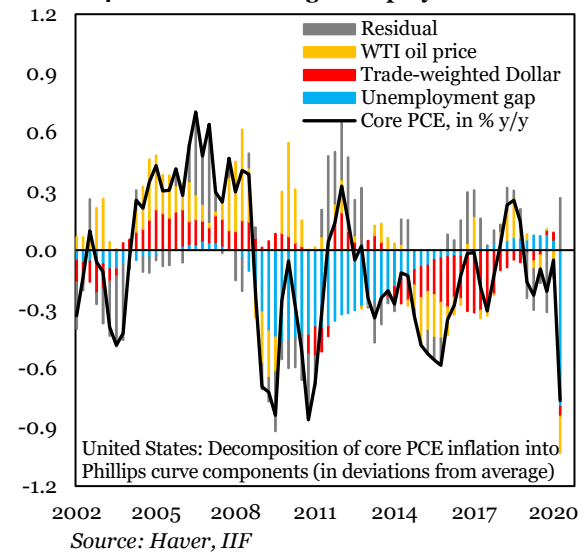


Exhibit 4. ... is due to rising unemployment.



As we have flagged on previous [occasions](#), Phillips curve regressions work less well for the Euro zone. The reason for this is a structural break around 2014, after which the regression predicts a rise in core inflation, which has failed to materialize (Exhibit 5). The decomposition of our “fitted” values shows that the trend rise in core inflation stems from the unemployment gap, which has become a positive driver of inflation, given that unemployment is below NAIRU, i.e. the labor market is “tight.” The decomposition also shows that there are systematic negative residuals in our Euro zone Phillips curve (Exhibit 6, grey), including in Q2 2020, which means that inflation is consistently below the regression “fit.” It is therefore in the Euro zone that inflation is “missing,” not in the US.

Exhibit 5. Euro zone inflation is a puzzle, ...

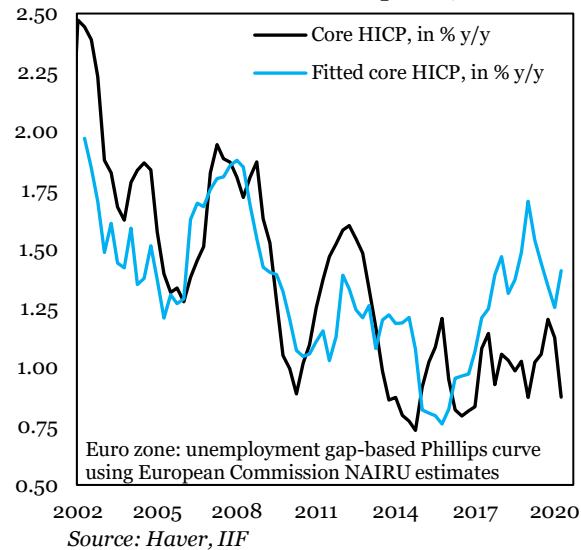


Exhibit 6. ... given that it has been low-for-long.

