Global Macro Views – Nonsense Output Gaps and the Phillips Curve

June 6, 2019
Robin Brooks, Managing Director & Chief Economist, rbrooks@iif.com, @RobinBrooksIIF
Greg Basile, Associate Economist, gbasile@iif.com, @GregBasileIIF

- Phillips curves provide a useful lens through which to look at output gaps, ...
- since they link the degree of economic slack to the pace of underlying inflation.
- We compare widely-used unemployment gap estimates to core inflation levels.
- Estimates for structural unemployment in the Euro periphery look too high, ...
- given inflation is low, relative to history, for similar levels of labor market slack.
- This supports our earlier analysis that Euro periphery output gaps remain large.

Our Campaign against Nonsense Output Gaps (CANOO) looks at prevailing output gap estimates through a simple “common sense” lens. We examine if countries with strong per capita growth in the last decade have output gap estimates that are larger (GDP > potential) than countries where growth has been weak. This is not the case, with strong growth countries often stacked above weak ones. Simple examples are Germany and Spain, which according to the IMF have similar, positive output gaps (GDP > potential), although the former has substantially outgrown the latter. Australia and Italy are another example. Both have similarly negative gaps (GDP < potential), even though Italy’s per capita GDP is down, while Australia is up a lot. We have proposed an alternative approach, allowing for a permanent GDP contraction in 2008, but assuming positive, if lower, trend growth thereafter. This avoids the kind of “bending down” that prevailing potential GDP estimates display, and yields output gaps that are often twice as big (GDP < potential) as consensus. This Global Macro Views uses the Phillips curve for a further “common sense” test, comparing widely-used unemployment gap estimates to core inflation. Structural unemployment estimates on the Euro periphery look too high, given how low inflation is relative to history for similar levels of labor market slack. This separate perspective confirms that economic slack, especially in Italy and Spain, remains large.

The Phillips curve links the scale of economic slack to the pace of underlying inflation. Exhibit 1 shows this relationship for the US, where the horizontal axis shows the unemployment gap – using NAIRU estimates from the CBO – and the vertical axis shows core PCE inflation. The red dots denote data since 2014, to see if recent inflation data – for given unemployment gaps – have trended lower. The black dot is Q1 of this year. There is no evidence core inflation is “abnormally” low for the current, slightly negative unemployment gap. The same cannot be said for the Euro zone, where we use European Commission estimates for NAIRU. Core inflation is too low, relative to history, for the unemployment gap. The simplest explanation is that estimates for structural unemployment have not fallen sufficiently, so that it looks like labor markets are tightening as the unemployment...
rate falls, when there is in fact still lots of slack. The Euro periphery drives much of this. Exhibit 3 shows a marked shift “down” for Italy, and the same is also true for Spain (Exhibit 4).

The underlying issue is that structural unemployment estimates are quite time-invariant, i.e. they fail to move lower as actual unemployment rates decline. This yields Euro zone unemployment gaps that are almost stacked on top of each other (Exhibit 5), despite very different levels of unemployment. Belgium, Spain and Portugal have similar unemployment gaps, despite unemployment in Q1 2019 being 5.5, 14.4 and 6.7 percent, respectively. More fundamentally, price pressures appear quite different, with Belgian core inflation almost three times that in Spain. Our suspicion that time-invariant estimates for structural unemployment are to blame is borne out by looking at the same picture in differences (Exhibit 6). The horizontal axis shows the change in the unemployment gap between 2015 and 2018, where nearly time-invariant structural unemployment numbers difference out. The vertical axis shows the change in core inflation over the same period. A downward slope exists, consistent with inflation rising faster where unemployment falls more. We see this as evidence that structural unemployment estimates remain too high on the periphery, consistent with output gaps (GDP < potential) above consensus.