

GMV – Inflation-consistent NAIRUs for Italy and Spain



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- Consensus NAIRU estimates put Italy and Spain close to full employment, ...
- even though the pace of underlying inflation has been subdued for many years.
- We propose a new empirical approach to estimate the degree of labor market slack, ...
- taking advantage of the historical link between inflation and labor market tightness.
- Our inflation-consistent estimates put NAIRU substantially below consensus numbers, ...
- suggesting that labor market slack in Italy and Spain may remain quite material.

A common push-back to our [CANOO](#) campaign is that we have not provided our own estimates of slack. Last week's [Global Macro Views](#) began to address this, using the Phillips curve – the historical relationship between inflation and economic slack – to back out what Euro zone NAIRU might be. Based on persistently low inflation, our inflation-consistent NAIRU is 5 percent, 3 percentage points below the consensus. With actual unemployment around 7.5 percent, our estimate says labor market slack is still substantial, in line with the subdued pace of underlying inflation. This note applies the same approach to Italy and Spain, which according to consensus are near full employment, which is hard to reconcile with low core inflation that in Italy is 0.5 percent year-over-year and 1.1 percent in Spain. In both places, our inflation-consistent NAIRU estimates are materially below consensus, pointing to still high levels of labor market slack.

Exhibit 1. Consensus NAIRU estimates say ...

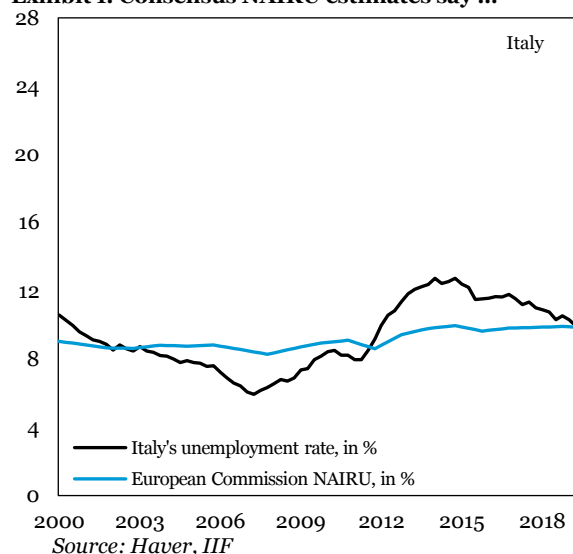
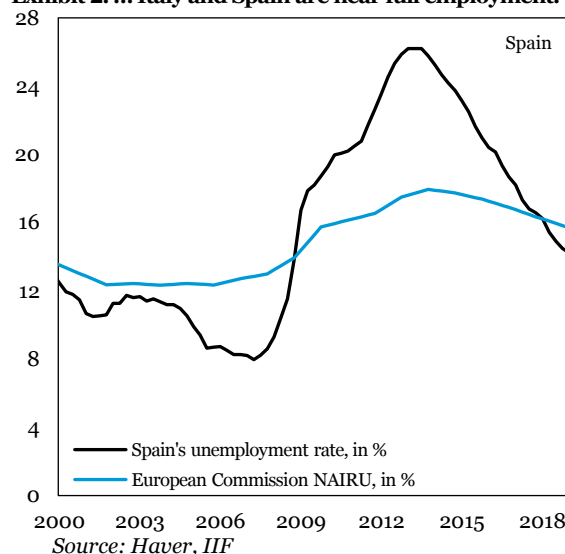
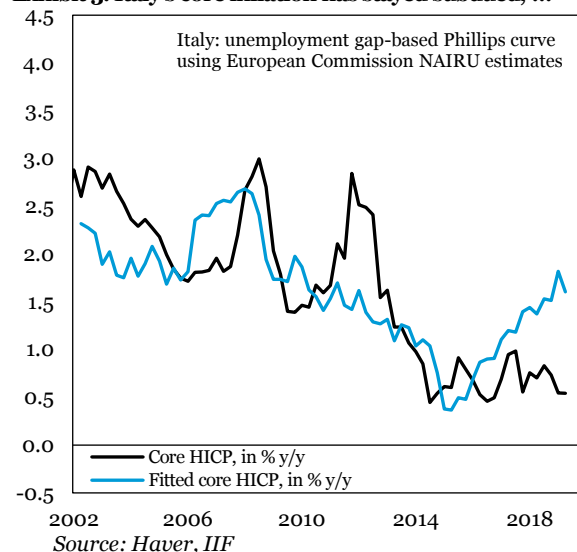
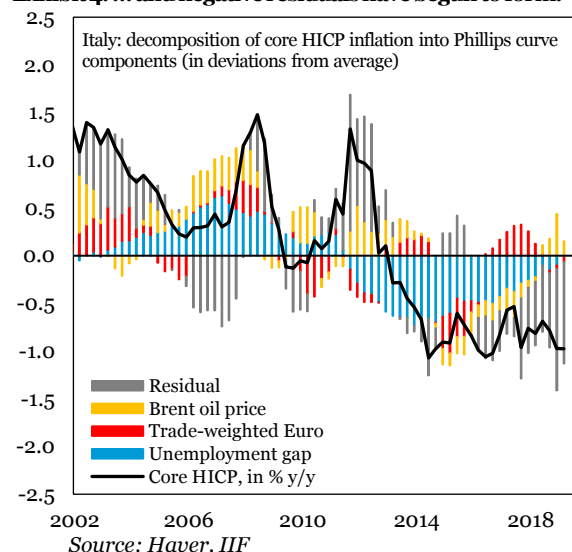


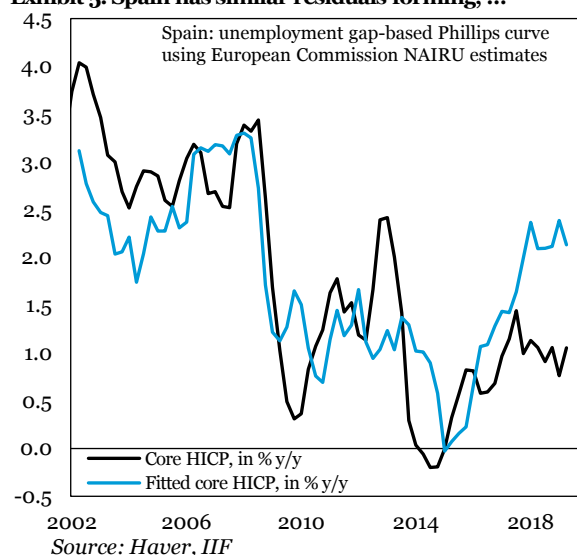
Exhibit 2. ... Italy and Spain are near full employment.



European Commission estimates put NAIRU at 10 percent for Italy (Exhibit 1) and 15 percent for Spain (Exhibit 2), so that both countries are essentially at full employment. As we have emphasized, however, the pace of underlying inflation on the Euro periphery, including Italy and Spain, is [especially](#) low, raising the possibility that NAIRU may be lower and labor market slack still substantial. We estimate augmented Phillips curves for Italy and Spain, using quarterly data from Q1 2000 to Q3 2019. Our specification links core HICP inflation to unemployment gaps, controlling for moves in oil prices and exchange rates. We use European Commission NAIRU estimates to calculate the unemployment gap and Brent oil prices plus the ECB's trade-weighted Euro as controls. Our intuition is simple. If NAIRU correctly measures the degree of labor market slack, we should be able to explain the recent evolution of inflation without the emergence of large residuals, i.e. without a systematic error. As we showed last week, this is very much the case for the US, where the CBO NAIRU yields unemployment gaps that explain the trend rise in core PCE inflation. But this is not true for the Euro zone, where large negative residuals form towards the end of the sample, because unemployment falling below the European Commission NAIRU drives fitted inflation up too much. We argued these residuals may be a sign that NAIRU is mis-measured and used our Phillips curve coefficient on the unemployment gap to derive an inflation-consistent NAIRU estimate.

Exhibit 3. Italy's core inflation has stayed subdued, ...**Exhibit 4. ... and negative residuals have begun to form.**

We now follow the same approach for Italy, where consensus NAIRU estimates drive inflation above recent levels (Exhibit 3), yielding negative residuals that, again, coincide with a narrowing unemployment gap (Exhibit 4). The same is true for Spain (Exhibit 5), where unemployment below the European Commission NAIRU also yields negative residuals (Exhibit 6). If we assume the emergence of these residuals reflects NAIRU measurement error, we can use our unemployment gap coefficient to estimate what an inflation-consistent NAIRU might be. For Italy this number is 7 percent (3 percentage points under 10 percent consensus), while for Spain it is 8 percent (7 percentage points below the 15 percent consensus).

Exhibit 5. Spain has similar residuals forming, ...**Exhibit 6. ... which point to still large amounts of slack.**