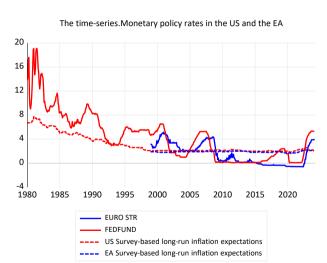
Has the fight against inflation been won? Discussion

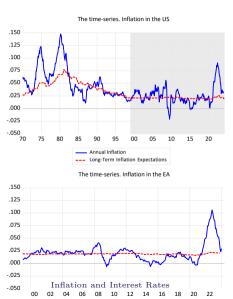
Carlo Favero

Bocconi University, February 23 2024

Inflation and Monetary Policy Rates.



Inflation and Monetary Policy Rates.



What do the data tell us?

- There is a (stochastic) trend in nominal rates in the US and EA.
- Inflation fluctuates around a rather stable long-run target in the US and the EA.
- There is a trend in real rates in the US and the EA.
- US monetary policy rates lead EA monetary policy rates.

The Natural Rate and the related risk

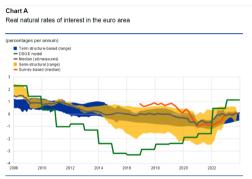
- Trends in rates are mostly due to trends in real rates that reflect trends in the "natural rate".
- the natural rate is driven by real forces in the economy such as productivity and demographics and it cannot be controlled by monetary policy.
- Monetary Policy controls fluctuations around the trend, but getting the trend right is a
 prerequisite for having stabilizing fluctuations.
- The data tell us that inflation expectations are solidly anchored and inflation is rapidly going to the target being already very close to it
- The risk of an imprecise measure for the "natural rate" is therefore related to reduced growth and, consequently, to fiscal instability in the EA.

The Natural Rate and the related risk

- the natural rate is the equilibrium real rate in the economy, the real rate prevailing in a long-run equilibrium when price rigidities are not relevant.
- in the standard Ramsey model households intertemporal optimization delivers a relationship between the natural rate of interest, the growth rate of output in the economy, and shifts in household preferences
- the data shows that shift in households preference are empirical relevant and the measurement of the real natural rate is subject to high uncertainty

The Uncertainty on the Natural Rate

Estimates of the natural interest rate for the euro area: an update, ECB Economic Bulletin, Issue 1 2024



Sources: Eurosystem estimates, ECB calculations, Federal Reserve Bank of New York and Consensus Economics.

Modelling Monetary Policy with trending natural rates: The US case

• A model of the FED monetary policy reaction function, with trending natural rates

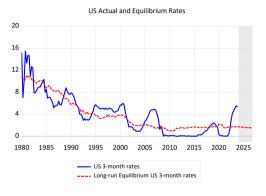
$$i_{t} = i_{t}^{*} + u_{t}$$

$$i_{t}^{*} = \gamma_{1} M Y_{t} + \gamma_{2} \Delta y_{t}^{pot} + \gamma_{3} \pi_{t}^{LR}$$

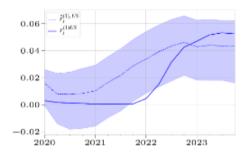
$$(i_{t} - i_{t}^{*}) = \rho(i_{t-1} - i_{t-1}^{*}) + \beta_{1} \pi_{t}^{gap} + \beta_{2} y_{t}^{gap} + v_{t}$$

- The age structure of the population, as captured by the ratio of middle-aged to young MY_t is the driver of changing preferences.
- a large sample is required to identify the effect of slow-moving variables on long-run equilibrium rates
- The model, estimated on pre-COVID data, is simulated (conditional on historical output and inflation gaps) in the post-Covid period to compare actual and model predicted monetary policy rates

Modelling the trend in US Monetary Policy



Actual and model predicted post-COVID Fed Monetary Policy



Difficulties and Risks for EA Monetary Policy

- It is difficult to identify the relevant trend and cycles in interest rates in Europe. The History of the EA is "too short" and estimation can only be carried out at the cost of large uncertainty.
- As inflation looks safely anchored, the more relevant risks seems to be those related to growth and fiscal stability.
- A Taylor rule perspective on the Fed explains well the current cycle of monetary policy but it also points out that "following the Fed" (that has more time-series data available), might be inappropriate for the ECB.
 - In the post Covid era the inflationary shock in the US has been mostly demand with output gap and inflation
 gap going in the same direction, while in Europe the supply side has certainly played a more important role
 with with the output gap and the inflation gap going in opposite directions.
 - unconventional fiscal policy played an important role not only in after-COVID inflation stabilization in Europe but also in reducing its heterogenous impact across income and age groups (see ECB Economic Bullettin, February 2024)