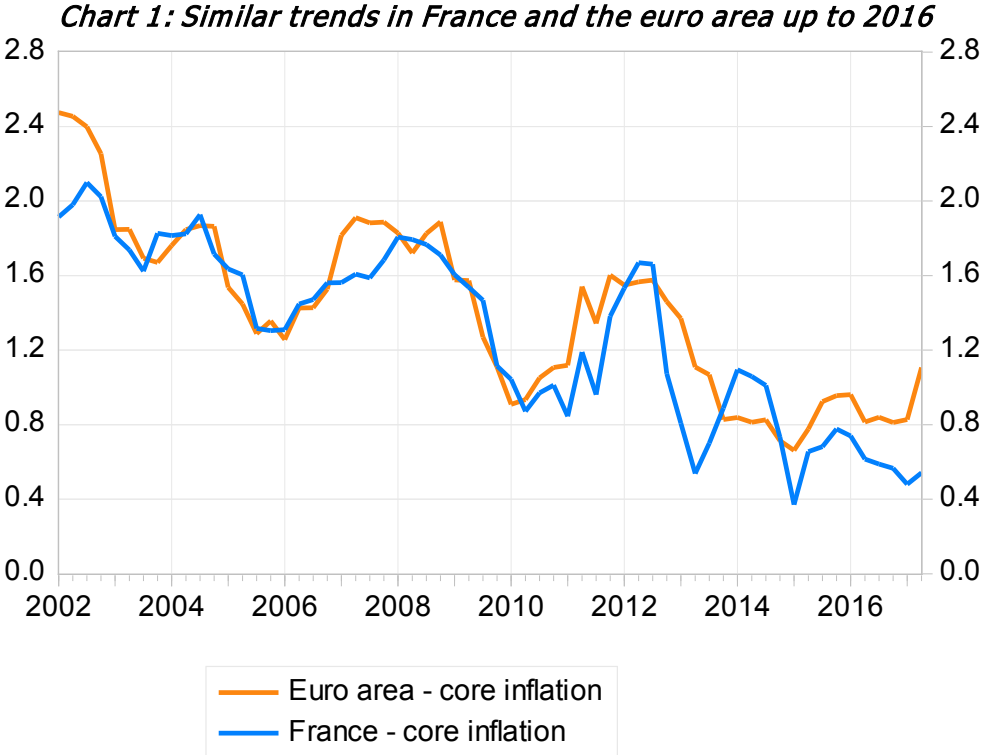


# The causes behind the France/euro area core inflation gap

By [Louis de Charsonville](#), Violaine Faubert and Antoine Sigwalt

*Since the start of 2016, French core inflation has been far below the euro area average. This gap can be attributed to the differences in economic fundamentals, such as the slower improvement in the labour market in France compared with that of the euro area as a whole, and, more recently, temporary shocks, such as the decline in the communications prices.*



Source: Eurostat. The euro area aggregate includes France.

**Since 2016, core inflation has been weaker in France**

Up to 2016, French non-energy, non-food inflation (core inflation, excluding the most volatile components) was on a par with that of the euro area as a whole (see Chart 1). From 2003 to 2015, it grew by an average of 1.3%, against 1.4% in the euro area as a whole (including France).

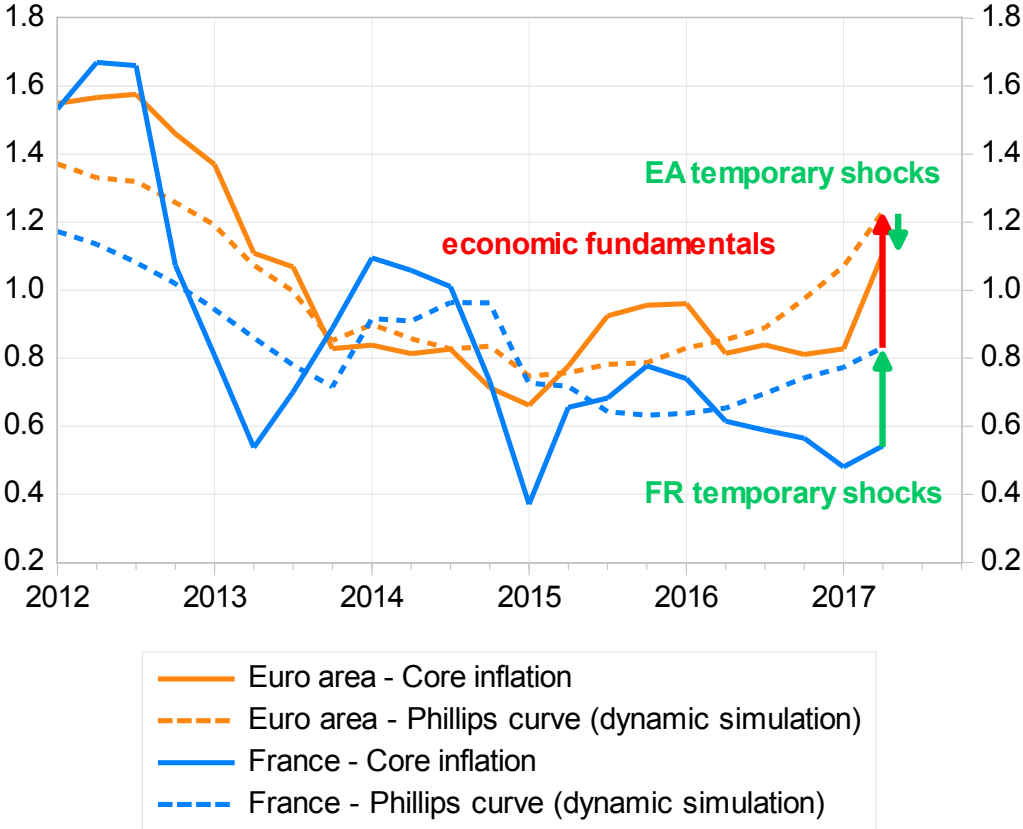
The core inflation gap between the euro area and France has nevertheless widened since 2016, and, above all, in the first half of 2017, when it reached 0.6pp in the second quarter of 2017.

**Explanation using a Phillips curve**

In order to analyse the core inflation gap between France and the euro area, we use a Phillips curve, which shows the relationship between unemployment and inflation (see [Rue de la Banque n°6](#)). We estimate for France and for the euro area a Phillips curve for the Q1 2003-Q2 2017 period: core inflation is assumed to depend on past core inflation, which captures inflation persistence, the unemployment rate, which measures domestic demand pressures, and changes in imported goods prices, which reflect the impact of external shocks (exchange rate fluctuations, commodity prices, etc.). Dummy variables are also added to capture the impact of changes in VAT rates.

Using this Phillips curve, it is possible to accurately forecast inflation dynamics for France and the euro area, as confirmed by the dynamic simulations carried out, which are close to actual inflation (see Chart 2).

*Chart 2: two-thirds of the gap due to fundamentals*

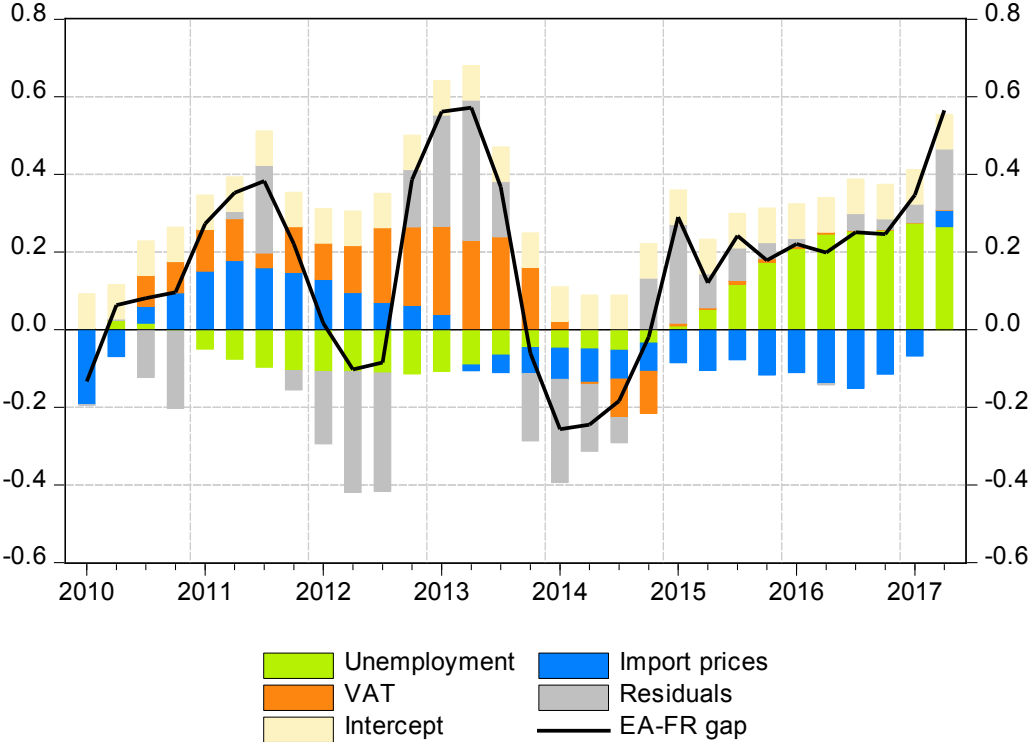


**Economic fundamentals and temporary shocks**

The core inflation gap between the euro area and France (0.6pp in the second quarter of 2017) can be decomposed as follows: 0.4pp explained by the Phillips curves and associated with economic fundamentals and 0.2pp attributable to temporary shocks. In Chart 2, the red arrow shows the impact of economic fundamentals by the differences between the dynamic simulations, represented by the dotted lines. The impact of temporary shocks is shown by the green arrows, which represent the differences between the simulation and actual inflation for each economy. Temporary shocks affecting inflation in France, such as the recent decline in communications prices, contribute 0.3pp to the core inflation gap. Those affecting the euro area contribute -0.1pp.

Therefore, of the 0.6pp core inflation gap between the euro area and France observed in the second quarter of 2017, two-thirds appears to be attributable to a divergence in economic fundamentals as measured by the Phillips curve (see Chart 2).

**Chart 3: The role of unemployment since 2016**



Sources: Eurostat and Banque de France calculations.

Note: The black curve represents the core inflation gap between France and the euro area. The bars represent the difference in contributions of each of the components calculated using the Phillips curve.

As regards economic fundamentals, between the first quarter of 2016 and the second quarter of 2017, the unemployment rate fell by 0.6pp in France, against 0.9pp in the euro area. Thus, the differences in labour market conditions explain 0.3pp of the core inflation gap (see green bars of Chart 3).

Moreover, since 2003, the core inflation of the euro area has been on average 0.1pp higher than that of France (see contribution of the constant to the core inflation gap between the euro area and France, Chart 3). Part of this difference stems from the change in the price of electronic appliances included in the sub-component "industrial goods" of core inflation, which diverges considerably between euro area countries. A difference in the way national statistical institutes process the "quality effect" of electronic appliances could explain this divergence. Furthermore,

since 2008, the measures implemented under the National Objective for Health Insurance Spending (ONDAM) tend to increase the use of generic drugs in France, which are less expensive. This therefore also contributes to bringing down inflation in France.

The rest of the core inflation gap observed in the second quarter of 2017, i.e. 0.2pp, can be attributed to temporary shocks (see grey bars, Chart 3), and in particular to the temporary decline in the price of communications observed in France since the first quarter of 2017.

### **This gap could persist in 2018**

When the impact of the decline in communications prices as of Q1 2017 ceases, core inflation in France is expected to move closer to that obtained by the Phillips curve, which would contribute to reducing the inflation gap between the euro area and France.

However, other specific factors, such as the reduction in social housing rents approved at first reading by the National Assembly, could have a negative impact on core inflation in France as of 2018, and could thus slow down the convergence of French core inflation towards that of the euro area.

Moreover, the unemployment rate is expected to fall in France and in the rest of the euro area, but probably without changing the unemployment gap between France and the euro area as a whole. Consequently, the core inflation gap could persist in 2018.