

Research Euro Area

Marginal economic impact from the heatwave

- The summer heatwave is a negative supply shock for the euro area economy, but the size of the shock is small.
- We expect euro area Q3 GDP growth to be reduced by 0.1pp, mainly due to weaker German growth linked to low Rhine River water levels.
- We expect only a marginal impact on prices.
- ECB communication to stay hawkish supported by the shock.

Western Europe has experienced extreme weather events over the summer, with potential consequences for the economy. The average temperature in June and July was 2.8 degrees Celsius above the normal, which is the highest ever recorded (see chart 1). At the same time, much of the region also saw widespread dryness and exceptionally low rainfall, leaving river flows were much lower than normal.

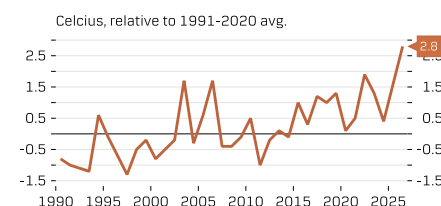
While there have been wildfires, the economic damages have not been significant on a macro level to constitute a positive demand shock once reconstruction starts. **The summer heatwave should thus mainly be seen as a negative supply shock, raising prices and lowering growth. Yet, the scale is important to note.** Europe has just been hit by one of the largest energy shocks in history from the war in Iran, and still inflation have risen only around one percentage points and growth continued as indicated by the PMIs last week. Given the scale of the heat-wave related disruption we expect the impact to be much smaller than from the war in Iran. While some sectors will be significantly hit, on aggregate level we expect it to only have a marginal impact.

To quantify the implications, we are mainly following transport on European rivers, energy production from French nuclear power plants, crop yields, and potential changes to labour productivity. Water levels on the German Rhine River (accounting for 5% of German freight transport) have fallen to extreme lows bottoming out at 7cm at Kaub on August 7 compared to a normal 190 cm at that time of the year. Since then, the water level has been rising and is now at 45cm (see chart 2). Research suggests that "low" water levels reduce German output by 1% per month below 78 cm. Hence, a temporary hit in Q3 is expected, but as there is significant slack in the German economy a rebound later also looks likely later, which is the historical experience from supply shocks. With the industry being around 25% of the **German economy we could see a hit to growth in Q3 of around 0.2 pp but then almost a similar rebound in Q4. For the euro area, we expect the impact to be smaller, so we only see an effect of around -0.1 p.p. to euro area GDP growth in Q3.**

The effect from the heatwave has likely been contributing to higher electricity demand for cooling but energy production has not been significantly affected. Electricity prices have increased during July and in August, and the effect of higher electricity demand for cooling has most likely contributed to this.

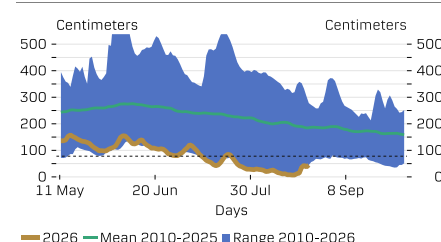
Chart 1: Hottest June and July on record in Western Europe

June-July air temperature, Western Europe



Source: C3S/ECMWF

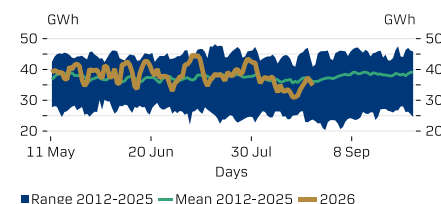
Chart 2: Rhine River water levels at record lows, obstructing traffic



Source: German General Administration of Waterways & Navigation, Danske Bank

Chart 3: French nuclear power generation at historical averages despite the heat

French daily nuclear power generation



Source: Bloomberg

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But the move also coincides with higher gas prices and the lagged effects of the Iran energy shock, so it is difficult to disentangle the Iran war impact from the heatwave impact. French nuclear production was at normal levels throughout June and July and has seen some fluctuations in August. Yet, production is still well inside the historical range of output at this time of the year – currently spot on the historical average (see chart 3).

Regarding the effect on food, production is affected due to the droughts which is likely to push up some prices. Yet, in term of growth, the agricultural sector is a very small part of the economy, only 1.7% of GVA in 2025 so the effect is not expected to show up in GDP data. The latest crop yield forecast from July 27 by the EU Commission expects a decline in 2026 crop production by one to four percent compared to a 5-year average (see table to the right).

The largest effect is on summer crops while winter-crops such as wheat were mostly harvested before the heatwave. All spring and summer crop yield forecasts have been lowered, most notably for grain maize and sunflower (6-7%) compared to the forecast in June. Hence, the price impact should be rather limited as it is also a global market. The European wheat future is up around 10% to 225 EUR/tonne (see chart 4) but that is now at the same level as last summer and well below the peak of 400 EUR/tonne seen in 2022. **Hence, the impact on food prices and production seems to be quite modest.**

Finally, heat could dent euro area growth through labour productivity, but we are sceptical of alarmist reads on a macro level. Much of the widely cited evidence comes from manual labour in emerging economies— hot, poorly air-conditioned, and not comparable to European offices and diversified economies. While there are likely regional and sectoral effects in Europe, we do not expect it to show up in aggregate GDP. Moreover, as the euro area economy has slack production should be able to rebound after a potential hit.

ECB communication to stay hawkish supported by the heatwave

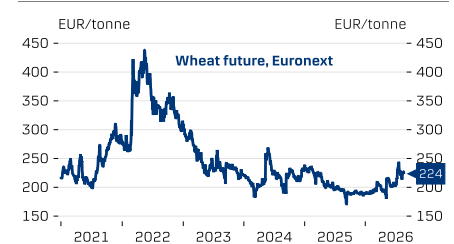
For the ECB, the heatwave is likely to support the hawkish sentiment in the near term, but we expect no effect on policy rates given the marginal economic effect. Although supply shocks can, in theory, be looked through, the ECB's recent response to the Iran-related energy shock suggests it views such shocks as a reason to raise interest rates. As the heatwave shock is much smaller than the Hormuz shock, we do not expect it to trigger a third hike beyond our forecast of a final 25bp increase in September. However, it is likely to reinforce the hawkish tone in ECB communication in the coming period. ECB's Lane noted on 18 August that the impact of weather events is likely to be seen mainly in 2027, with food inflation as a key driver.

EU crop yield forecasts for 2026 revised lower in July compared to June

Crop	% diff 5yrs avg	% diff prev. month
Sunflower	-2	-7
Grain maize	-2	-6
Soybeans	-2	-5
Field beans	1	-5
Total cereals	-1	-4
Potatoes	-1	-3
Total wheat	0	-2
Rye	0	-2
Sugar beet	0	-2
Field peas	2	-2
Total barley	0	-1
Triticale	-2	-1
Rapeseed	-2	-1
Green maize	-4	N/A

Source: JRC MARS, 27 July

Chart 4: Wheat future is up 10% but at similar level as last year



Source: Bloomberg

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