

# Heatwaves and economic activity: what can we learn from business leaders' comments?

By Melanie Coueffé, Léo Parpais and Maxime Ponsart

*The year 2026 was marked by three successive heatwaves, an exceptional drought and severe wildfires. The Banque de France's Monthly Business Survey makes it possible to track, almost in real-time, how these events affected firms, and the differences in impacts across sectors. This information is then used to compile the Banque de France's GDP growth forecast. Overall, the impact on activity is expected to remain limited in 2026 and should mainly be concentrated in agriculture.*

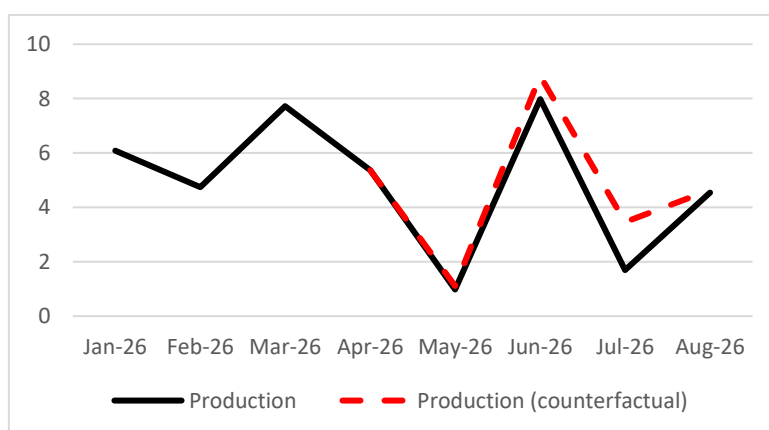
The Monthly Business Survey (MBS) questions approximately 8,500 companies each month on the change in their economic activity, headcount, deliveries, order books, etc. The responses are aggregated into balances of opinion that describe the economic environment, and are used in the Banque de France's economic forecasting models to predict quarterly GDP growth.

## The heatwaves can be identified in business leaders' comments

In addition to answering questions on the economic environment, business leaders describe the main factors affecting their activity. This information can be found in the comments section of the survey and makes it possible to identify quickly how firms have been affected by specific events.

We searched these comments for references to heatwaves, extreme temperatures, the wildfires in the Gironde department and adjustments to working hours. In July 2026, 21% of surveyed firms spontaneously referred to one of these events, with 18% mentioning heatwaves or extreme temperatures and 3% citing the Gironde wildfires (in the Nouvelle Aquitaine region, 19% of firms cited the fires). The hottest regions were not necessarily those where heatwaves were mentioned most frequently. This may suggest that firms more regularly exposed to extreme heat have adapted their operations accordingly.

**Chart 1: Balance of opinion (published and counterfactual without heatwaves) on the monthly change in manufacturing production**



Source: Banque de France Monthly Business Survey.

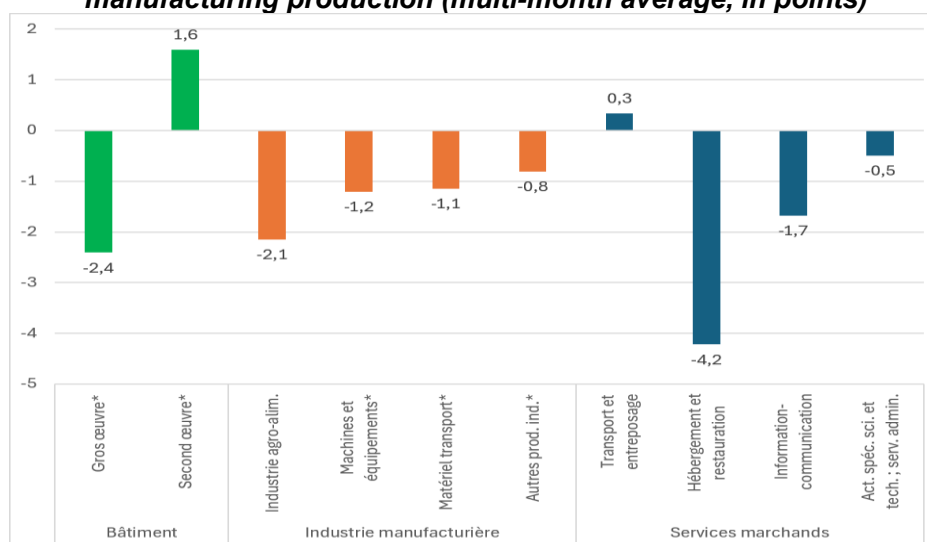
*Note: The balance of opinion is calculated as the difference between the number of firms reporting a rise in production compared with the previous month and the number reporting a fall. A positive balance indicates that, overall, firms believe production improved.*

Using this information, we constructed a series of “counterfactual” balances of opinion by excluding those firms that referred to heatwave effects (see Chart 1). To do this, affected firms were assigned the average response of firms that did not report any heatwave-related effects in their sector. The difference between the real and counterfactual balances of opinion provides an estimate of the heatwave effect contained in the real balances. A similar methodology was used to measure the impact of [the 2023 industrial action](#) and the [gilets jaunes protests](#) on activity.

Chart 1 suggests that the high temperatures had their greatest impact on manufacturing activity in July. The balance of opinion on production was 1.7 points, whereas it would have been 3.5 points in the absence of the heatwaves (difference of 1.8 points).

### Contrasting effects across sectors

**Chart 2: Impact of the heatwaves on balances of opinion on services activity and manufacturing production (multi-month average, in points)**



Source: Banque de France Monthly Business Survey.

*Note: The impact of the heatwaves (difference between real and counterfactual balances of opinion) is a multi-month average for May to August.*

*(\*) : average for May to July only due to the large number of firms that closed for August.*

*Interpretation: In the agri-food sector, the heatwaves reduced the balance of opinion on production by an average of 2.1 points between May and August.*

The overall impact of the heatwaves on activity was negative, although with significant variations across sectors (see Chart 2). Among the sectors covered by the survey, accommodation and food services and agri-food were the worst affected. The impact on agri-food was roughly twice as large as that observed in other manufacturing industries. In construction, the negative impact on structural works was partly offset by stronger activity in finishing works (renovations), probably reflecting a substitution effect.

Business leaders' comments point to three main transmission channels.

First, the heatwaves prompted firms to adapt their operations. In manufacturing and construction, many firms adjusted working hours or even suspended activity temporarily to

maintain acceptable working conditions, or because extreme temperatures had damaged certain materials. Most of these firms planned to make up the lost production at a later stage, indicating that the observed fall in activity during the heatwaves will not necessarily translate into a permanent loss of output.

Second, the high temperatures caused a shift in demand, boosting some activities at the expense of others. Tourism and accommodation and food service activities saw a sharp slowdown, whereas demand for fresh produce and beverages increased. Demand for air conditioning installation also rose, helping to support activity in some branches of finishing works. Transportation and storage also benefited slightly from the need to replenish supplies more frequently.

Some effects are indirect and materialise with a lag. Several business services firms indicated a slowdown in orders, probably due to customers cutting back or postponing expenditure. Some firms also reported an increase in remote working.

In addition to these relatively limited short-term effects, firms voiced concerns about the coming months. Agri-food firms reported livestock deaths, the premature depletion of fodder stocks and the impact of drought on certain crops. This could result in sharper declines in production, or even shortages, in the autumn and winter, with potential repercussions for prices.

## **From sectoral analysis to GDP forecasts**

This information not only helps identify the sectors most affected, it also provides a clearer understanding of changes in the balances of opinion used in our short-term GDP forecasts. For sectors covered by the MBS and incorporated into our short-term GDP forecasting models, we estimated the impact of the heatwaves by comparing a forecast based on published MBS data with a forecast based on counterfactual data adjusted to exclude the heatwave impacts.

This analysis suggests a limited impact on GDP growth for those sectors included in the survey, amounting to -0.01 percentage point in the second quarter and -0.03 percentage point in the third quarter. Manufacturing firms expect to recoup part of the production lost over the summer, fuelling a modest rebound from September onwards.

## **Most of the impact should be concentrated in agriculture**

However, this estimate based on the MBS only covers part of the economy. Agriculture, which is potentially the sector most affected by the heatwaves and drought, is excluded from the survey.

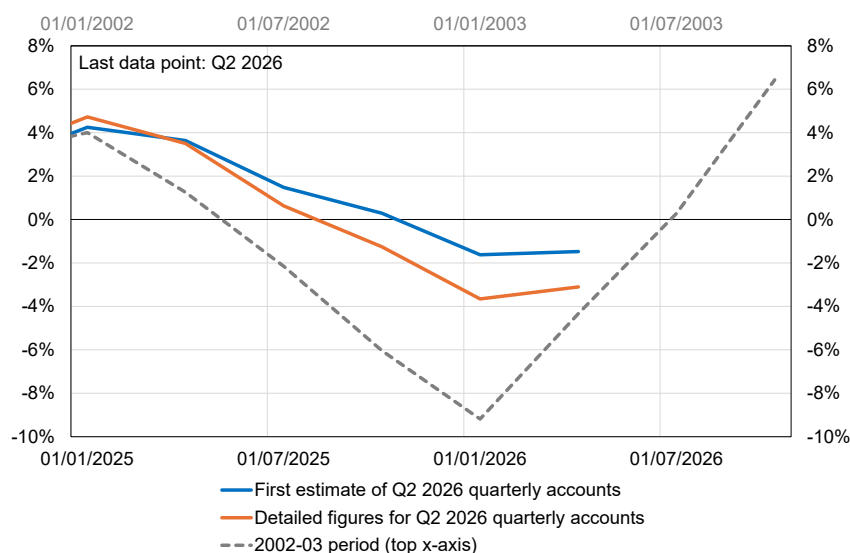
The heatwaves and drought have had a significant impact on agricultural output. However, the impact on quarterly growth is difficult to measure, since agricultural value added is largely smoothed over the year in [INSEE's quarterly national accounts](#). This treatment reflects the fact that agricultural output is recorded throughout the production cycle and not just at the time of harvest.

In 2003, agricultural value added fell by 15.4% over the year. The impact should be smaller in 2026, as the losses in 2003 were amplified by a cold winter and dry spring. In addition, agriculture's share of GDP has decreased from 1.7% in 2002 to 1.2% in 2025.

Preliminary estimates for 2026 from Agreste, France's agricultural statistics office, show sharp falls in yields for several crops, particularly maize and fodder crops. At the end of August, INSEE had already begun to incorporate these agricultural losses into the quarterly national accounts.

Projections calculated using our models suggest agricultural value added will fall by 6% in 2026, reducing annual GDP growth by 0.1 percentage point.

**Chart 3: Quarterly change in agricultural value added**



Sources: INSEE, Banque de France calculations.

*Note: The blue line shows the figure for agricultural VA published at the end of July in the first estimate of Q2 GDP. The orange line shows the figure for agricultural VA published at the end of August in the detailed figures for Q2 GDP. The grey dotted line shows observed agricultural VA over the period 2002-03 (top x-axis).*

## Effects in other sectors are mixed

In the energy sector, the high temperatures affected both demand and production conditions. Increased demand for air conditioning and cooling boosted electricity consumption and generation in June and July. In August, by contrast, output declined as the high temperatures and drought forced several nuclear reactors to reduce capacity or shut down temporarily.

In public works, the high temperatures mainly acted as a constraint on production. According to INSEE, in the third quarter of 2026, 33% of firms reported weather-related production bottlenecks, the highest proportion since 2018. However, the impact is difficult to quantify as it coincided with the period following municipal elections, when activity generally falls.

## Overall, the heatwave episodes are expected to reduce GDP growth by 0.1 percentage point in 2026

In the sectors covered by the MBS, the effects of the extreme heat appear highly uneven, but remain limited at the aggregate level. An analysis of business leaders' comments sheds light on the reasons: businesses adapted their operations, can recoup some of their lost production, and experienced contrasting demand effects depending on the sector.

Most of the macroeconomic impact over the year should come from the agricultural sector. Overall, the heat and drought episodes should reduce annual GDP growth by around 0.1 percentage point in 2026. By way of comparison, [the Banque de France macroeconomic projections](#), published in September 2026, forecast GDP growth of 0.4% for the year as a whole. This estimate is broadly in line with that published by [INSEE](#).

It should be noted that this estimate of the GDP impact does not capture the full economic cost of extreme climate events. Damage to natural and physical assets, particularly that caused by wildfires, represents a loss of wealth that is not necessarily recorded in GDP, which measures production flows.