Payroll employment

The scope of INSEE employment estimates

INSEE employment estimates track the **number of persons in employment** after processing multiactivity:
- employment is measured over the last week of the year and any job recorded in the administrative data (social declarations, payroll files) is accounted for;
- processing multiactivity means that persons who have more than one job during the last week of the year are counted only once for their main job, which corresponds to the one that provides the highest remuneration over the year.

Employment estimates cover France (excluding Mayotte). Total employment data (payroll employment and self-employment) **are produced on an annual basis**. **Two quarterly estimates** are also computed:
- a **flash** estimate, published about 40 days after the end of the quarter, covers private payroll employment. [1]
- a **detailed** estimate, published about 60 days after the end of the quarter, covers total payroll employment. It covers all sectors of activity in the French classification of activities (NAF rev. 2), excluding extraterritorial activities. Compared to the flash estimate, it adds employment in the civil service. This national estimate is completed, approximately 80 days after the end of the quarter, with a breakdown of employment by geographical area (regions, departments).

The split between the public field (or civil service) and the private field is based on the legal category of employers.

The public field corresponds to the one that INSEE follows annually through the System for Information on Civil Servants (SIASP). Over this field, the concept adopted for the year-end level in the employment estimates differ slightly from the concept of workforce as published on civil service employment, which results from the SIASP system:
- the employment estimates take into account all jobs, including secondary jobs (see definition of "post of work"), while the number of employees in the public service published with the SIASP source on civil service employment is measured as final main jobs as at 31 December.
- multiactivity is taken into account in the employment estimates but is partially taken into account in the workforce from the SIASP source.

Sources of quarterly employment estimates

Since the first quarter of 2020, the flash estimate for the private sector (excluding agriculture and private individuals employees) is based on the "*Declarations sociales nominatives*" (DSN) received and processed on an early basis by the URSSAFs (social security contribution collection offices), DARES (statistical service of the Ministry of Labour) and INSEE.

In addition, for the most recent quarters in the series, a forecast is made by INSEE on the employment of private individual employers.

The **detailed estimate of payroll employment on the total field, about 60 days after the end of the quarter** is drawn up from different sources:
- the Urssaf (via its Séquoia system) processes the "*déclarations sociales nominatives*" (DSN) of establishments in the private non-agricultural field, excluding temporary work; the DSN have replaced the "*bordereaux récapitulatifs de cotisations*" (BRC) since 2016.
- the Dares uses DSNs for temporary employment agencies; they have replaced the *Pôle emploi* files of

declarations from temporary employment agencies; this field is handled by Dares (see Dares methodological note).

- INSEE processes different sources for the other fields:
  - on the public field, until the second quarter of 2022:
  - DSNs for the three civil services have replaced payroll files (for central government civil servants) and BRCs since 2024, via the Héraclès system;in the field of agriculture, DSNs, within the Héraclès system, insofar as since 2024 all declarations of social contributions collected by the agricultural social-security mutual fund (*Mutualité Sociale Agricole*, or MSA) have been converted to DSNs, which was not previously the case for some of the Tesa (*titre emplois simplifiés agricoles*).
  - declarations of private individual employers from three administrative requirements: simplified nominative declaration (DNS), universal employment service check (*chèque emploi service universel*, CESU) and childcare allowance (*prestation d'accueil du jeune enfant*, PAJE).

The method to compute quarterly employment estimates

The method used to compute quarterly employment estimates is based on the employment levels derived from INSEE's annual employment estimates. Quarterly growth rates are applied to these reference employment levels. When new annual estimates become available, the quarterly estimates are revised accordingly. Indeed, the annual estimates benefit from a more in-depth expertise and a complete treatment of multi-activity. In the quarterly estimates, the share of the multi-activity is implicitly assumed to be stable within each sector.

Since the results of 2007, the **definitive annual employment estimates** are based on the localised employment estimates system (Estel), which summarises several administrative sources. They are based, in part, on the social declarations for employees (private sector, civil service and private individuals employees) and in part on the database on self-employed, built from URSSAF and MSA data. Over the period for which the Estel data are not yet available (the last year or the two last years), provisional annual estimates are computed from other administrative sources available more quickly, most of them already used in the quarterly estimates.

In the employment detailed estimate published 60 days after the end of the quarter:
- for some activity sectors, the quarterly employment growth rates result from both data processed by URSSAF on the private sector and by INSEE on the public service. This is the case for water supply (EZ), research and development (MB), public administration (OZ), education (PZ) and human health activities (QA). In social work activities (QB), the tracking of the employment of private individuals' employees is added.
- for private individual employers, data for the last three quarters are not available and estimates are obtained by extending recent trends. These data are used to track the home-based employment of private individual employers (TZ), and the employment in social work activities (QB).
- the administrative and support services activities sector (NZ) is also monitored by using several sources: the source handled by URSSAF on the field of private sector excluding temporary employment and the one handled by DARES on temporary employment.
- for the agriculture sector (AZ), the DSN for the MSA field is processed by Insee, except for the DOM, for which quarterly changes are provided by URSSAF.
- for all other sectors, where the payroll employment is almost exclusively private, quarterly growth rates are provided by URSSAF (but the employment levels do cover all employees, both private and public).
- regardless of the sector, all establishments in the field are included, even those created during the quarter irrespective of their size.
- excluding temporary work, the quarterly indicator used is the evolution of the number of contracts unfinished at the end of the period (generally on the last business day of the quarter).

Periods of employment, general method and exceptions

The general method is to calculate the change in the number of outstanding contracts at the end of the period, (on the last working day of the quarter.)

However, there are exceptions:

On **temporary employment**, the quarterly indicator used is the change in the average number of outstanding contracts during the last five working days of the month. At the time of the flash estimate, DARES calculates a so-called "revised" estimate for the first two months of the quarter that takes into account the exhaustive monthly DSN

declarations of temporary employment agencies. For the last month of the quarter, DARES calculates a provisional result by applying the "data balancing" method: only the statements of agencies that had missions during both the second and third months of the quarter are recorded. Then DARES estimates monthly series (both corrected and non-corrected for seasonal variations) taking into account the revised evolution for the first two months and the estimated provisional evolution for the last month of the quarter. For publication 70 days after the end of the quarter, the Dares estimates monthly series corrected and non-corrected for seasonal variations where the evolution of temporary employment is final for the three months of the quarter.

For private individual employers, since the first quarter of 2025, growth rates have been calculated using data based on the number of employees, whereas previously the data used, as in the general case, was based on the number of jobs. This change is justified by the high level of multi-activity among employees

For the agriculture sector, since 2024, all Tesa (titres emplois simplifiés) have been processed via the DSN, whereas previously some of them were only processed directly by the MSA. Since the first quarter of 2025, payroll employment on these seasonal agricultural contracts alone has been measured as an average over the course of the month, in order to limit the volatility of the series for payroll employment in agriculture (the data have been back-calculated on this concept since 2018).

The series disseminated are corrected for seasonal variations, with the X13 Arima method in the JDemetra+ software.

Available series of employment

The flash estimate only covers the private field. It is broken down by major activity sector: agriculture, industry, construction, market services, non-market services. In market services, temporary work is isolated. When a quarter flash employment is published, data for previous quarters are not revised.

The detailed **estimate published about 60 days** after the end of the quarter covers all employees. It is disseminated at A38 level of NAF rev. 2, with, in some sectors, a breakdown at A88 level (29, 30, 41, 42, 43, 45, 46, 47, 55, 56). In the administrative and support services (NZ), temporary employment is isolated. It is also broken down by user sector, at A17 level of NAF rev. 2. For all employees, the private field is distinguished from the public field. The same applies to the large activities sectors (agriculture, industry, construction, market services, non-market services).

Since the publication of the first quarter of 2022, some series, which started only in the fourth quarter of 2010, have been extended and now start in the fourth quarter of 1989:

- by sector, the series of payroll employment in agriculture and the non-market services sector (public administration, education, health and social work);
- by employer, the public/private split of the agricultural, industrial, construction and market and non-market services sectors.

Total payroll employment and by employer (public/private) is thus available since 1989. This was made possible by backcasting the annual estimates on the above-mentioned fields, and by applying statistical smoothing to obtain the intermediate quarters, which were not observed "in real time" on these fields.

When the *Informations Rapides* on 70-day employment estimate is published, in partnership with the URSSAF and DARES, on the same day, URSSAF publishes, on the private field, quarterly series on workforce headcount, payroll and average wage per capita. The levels published by URSSAF, in terms of workforce (or "posts"), are not processed regarding multiactivity and thus differ from employment levels published by INSEE.

Since the publication of Q1 2024, additional indicators have been introduced to usual business sectors series, with data parted by sex, age and type of contract, in private payroll employment. These data are available in seasonally adjusted series, starting at 2017, and split by business sectors (level A5 of the activity nomenclature). The method to calculate those indicators follow the same principle as the one used for sector activity indicators :

- initialisation from series until the last annual estimate available in the Annual Estimate of Employment (currently 2022)
- for the period for which final data are not yet available (the last years) : temporary estimation with the help of evolution coefficients estimated from the DSN (except private individual employer, for which previous sources were given)

Revisions

When the 60-day detailed employment estimate is published, data for previous quarters are subject to revision. On the one hand, the raw data can be revised, either by incorporating new information (delayed declarations, etc.), or additional processing, or by taking into account new annual estimates (in autumn n+1 for the provisional annual estimate of the year n, in March n+3 for the final estimate). On the other hand, every quarter, the updating of the seasonal variation coefficients leads to a slight revision of the series published. Specifically, seasonal adjustment models are recalculated once a year, when the results for the first quarter are released. In the publications for the other quarters, the seasonal coefficients are revised but the models remain unchanged.
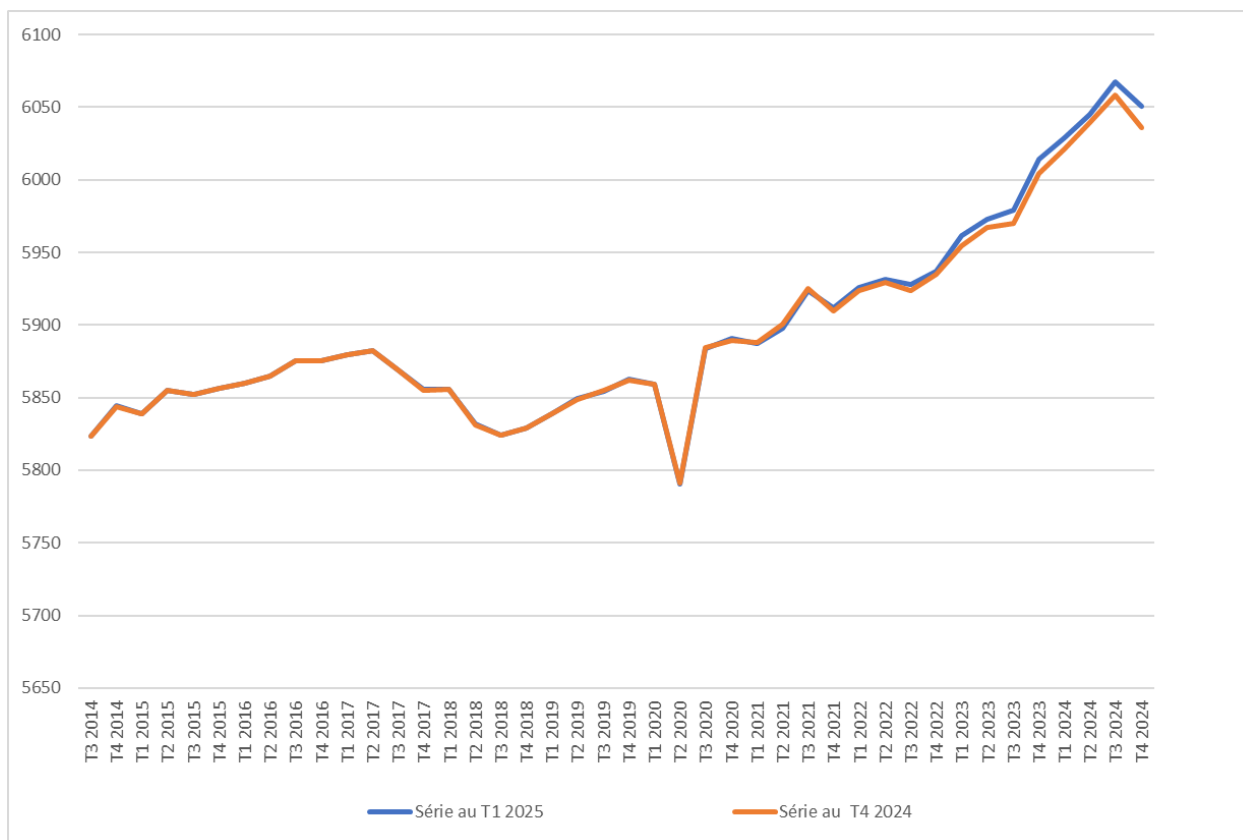
For the publication of **Q1 2025**, as written in the methodology presented before, quarterly estimates have been fitted on the last definitive annual employment estimate (2023). In consequences, quarterly private payroll employment estimate levels were revised downwards before 2023 (*figure 1*) and public payroll employment were revised upwards before 2023 (*figure 2*). The infra-annual profile of trends in private and public payroll employment estimates has been slightly revised (*figure 3 and 4*).

Figure 1: Levels of private payroll employment (in thousands)
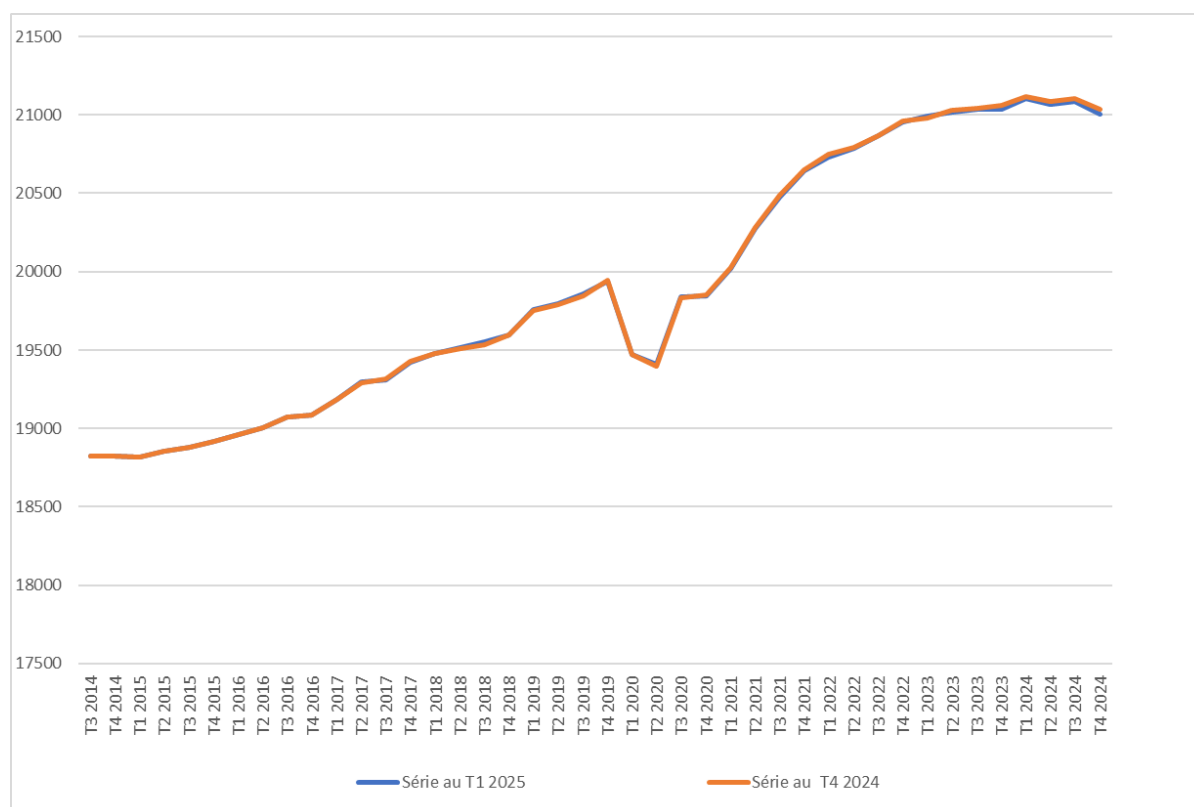
Source: INSEE, URSSAF, DARES.

Figure 2: Levels of public payroll employment (in thousands)

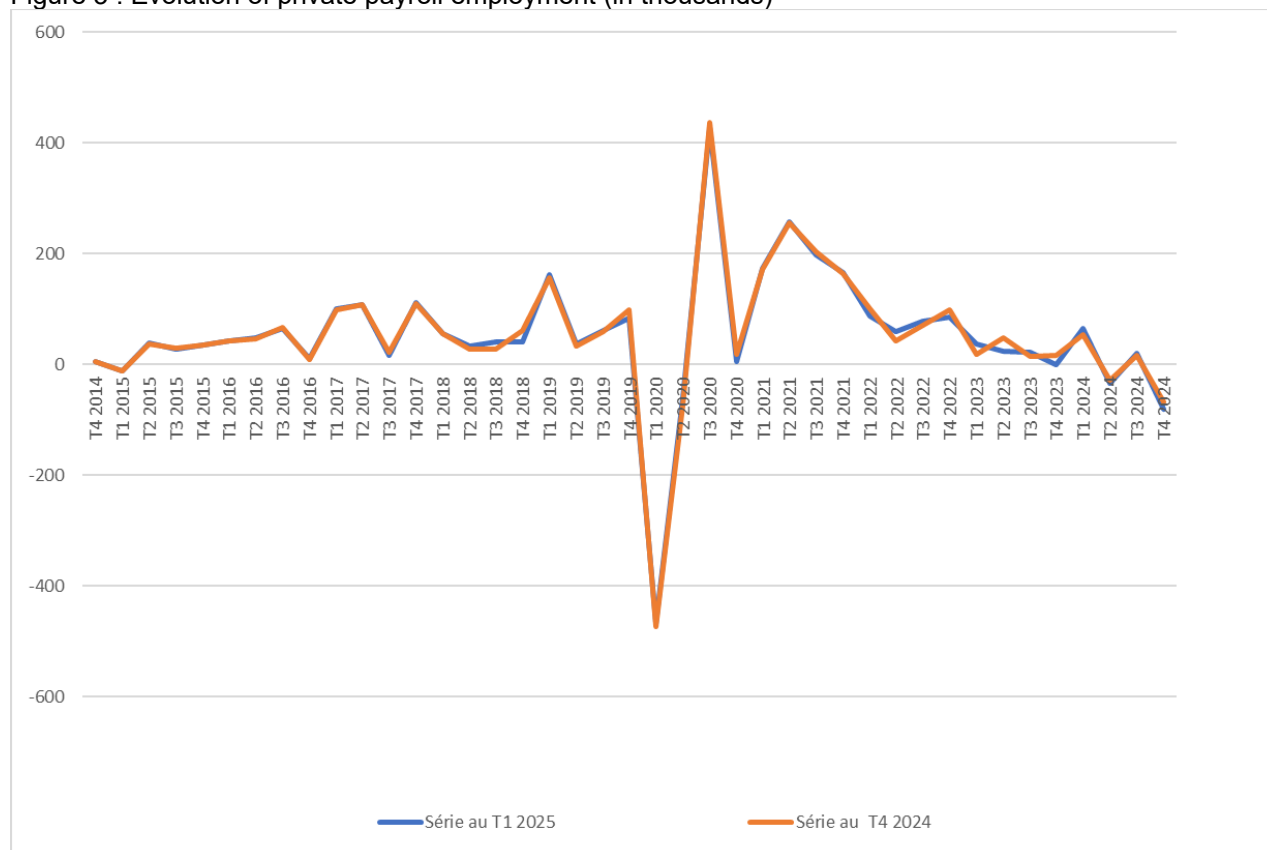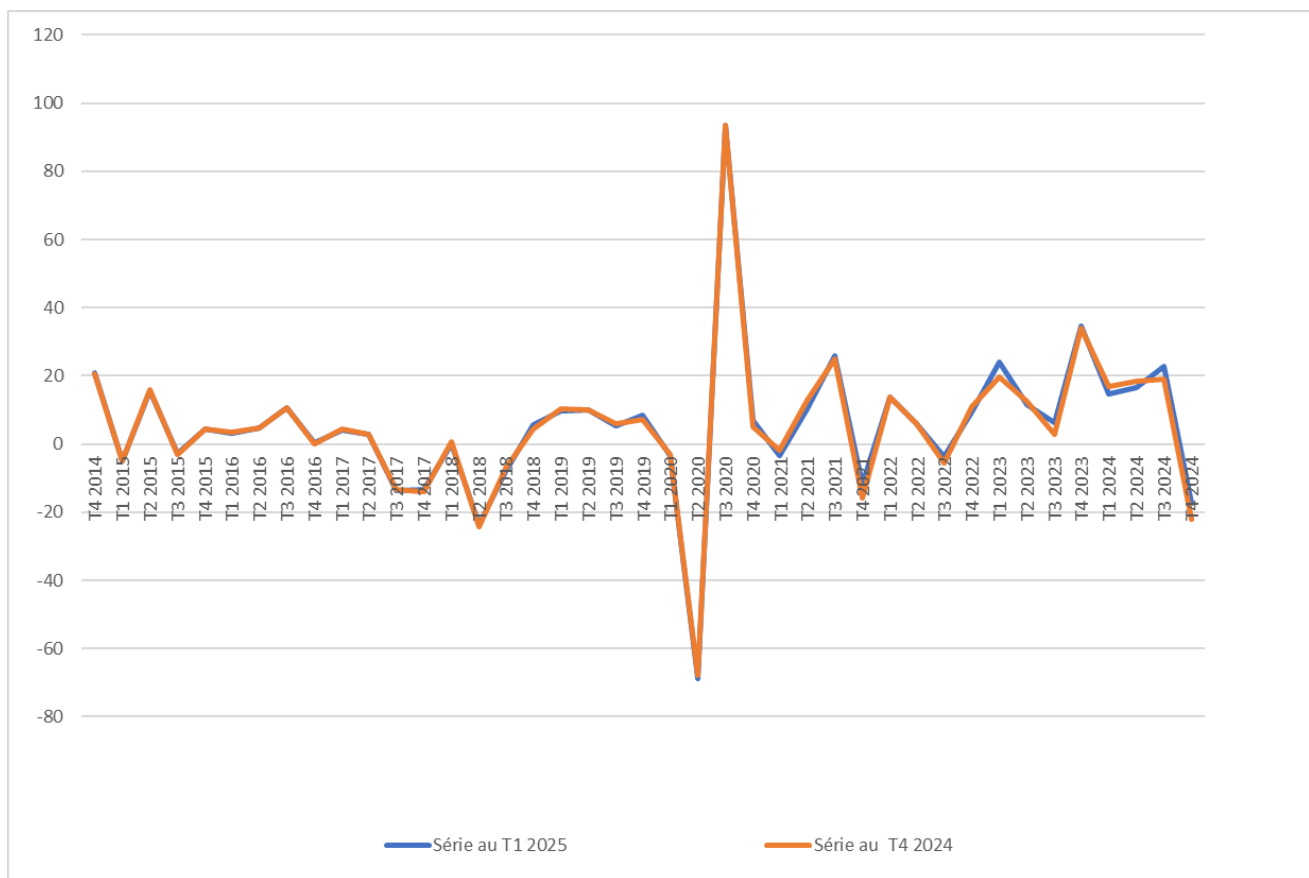Figure 3 : Evolution of private payroll employment (in thousands)

Figure 4 : Evolution of public payroll employment (in thousands)

Source: INSEE, URSSAF, DARES.