

## ILO unemployment and labour market-related indicators (results of the Labour Force Survey)

### Sources used

**The continuous Labour Force Survey** is a household survey covering everyone aged 15 or over. It provides a measurement of the concepts of activity, unemployment, employment and inactivity as defined by the International Labour Organization (ILO). It is the only source for implementing the definitions recommended by the International Labour Organization (ILO). This is a quarterly survey, with data collected continuously, during every week of every quarter within the scope of ordinary dwellings (excluding communities: workers' hostels, hospitals, prisons, etc.). Since 2014, the Labour Force Survey is ongoing conducted in France excepted Mayotte.

In metropolitan France, about 65,000 households are surveyed every quarter, representing a sample of respondents of about 100,000 people aged 15 or over. Every quarter, one sixth of the sample is renewed, with five-sixths being retained, to ensure a better accuracy of variations.

Since 2014, the Labour Force Survey has also been conducted on an ongoing basis in four overseas departments (Guadeloupe, French Guiana, Martinique, Reunion Island). About 7,000 households, corresponding to 11,500 people aged 15 or over, are interviewed every quarter, using exactly the same questionnaire as that used in Metropolitan France. Up to and including 2013, results from the overseas departments were published using data from the annual survey taken in the second quarter of the year. An annual survey has also been put in place in Mayotte from 2013.

Every ten years or so INSEE overhauls the Labour Force Survey questionnaire to take account of labour market developments. On that occasion, the long series published with *Informations Rapides* are backcasted to make them consistent with this new questionnaire. The latest update was done in 2013.

### Series and method

The **unemployment rate** is calculated as the ratio of the number of unemployed to the number in the labour force (people in employment or unemployed). It is accompanied (file *sl\_chomage\_en.xls*) by the number of unemployed and the long-term unemployment rate. The **other labour market indicators** (file *sl\_indicateurs\_en.xls*) cover the structure of the population (employment, unemployment, activity), the nature of employment (type of contract, work time), and situations similar to unemployment (unemployment halo, underemployment).

From the 3rd quarter of 2019, all quarterly indicators from the Labour Force Survey survey are released on the "France excluding Mayotte" scope. Previously, only unemployment was reported in this scope and the rest of the indicators were restricted to the "Metropolitan France" scope. Since 2014, the Labour Force Survey survey has covered the four historical overseas departments (Guadeloupe, French Guiana, Martinique and Réunion), allowing direct observation of quarterly data on the new "France excluding Mayotte" scope. For the years 2014 to 2018, the hindsight is considered sufficient for first estimates of seasonal adjustment coefficients. In addition, for the years 2003 to 2013, all series were backcasted. Annual average series were first constructed based on the results of the annual DOM surveys that existed until 2013. In a second step, these series were converted at a quarterly frequency by extending the average seasonality of the DOM series observed over the period 2014-2018. A note detailing this work is available in the "documentation" section of this publication.

All the series are adjusted for seasonal variations using the X13-ARIMA method in the JDemetra+ software package. The seasonal adjustment is applied to the entire period, from the first quarter of 2003 to the current quarter.

### Publication and revision of series

The quarterly results of the Labour Force Survey for a given quarter are published **in the middle of the second month following the end of that quarter**. The seasonal adjustment coefficients are recalculated every quarter, which may result in a slight revision to the whole of each series.

Seasonal adjustment models are recalculated once a year, at the time Q1 results are released. For the publications related to other quarters, the coefficients are recalculated under unchanged models. Lastly, regular revisions of demographic data from the final resets of the census, known with a four-year lag. This results in slight changes being made annually (for Q1 release) to numbers and rates estimated using the Labour Force Surveys four years before the reference year.

### Understanding the results in *Informations Rapides*

#### **ILO UNEMPLOYMENT AND UNEMPLOYMENT RATE**

An **unemployed person as defined by the International Labour Organization (ILO)** is a person of working age (conventionally 15 or over) who meets the following three criteria:

- 1) has not worked, not even for one hour, in the course of the reference week,
- 2) can be available for work within two weeks,
- 3) has actively looked for a job in the previous month, or has found one starting within the next 3 months.

The **share of the unemployed** is the ratio of the number of unemployed to the number of people in a considered population; this is different from the **unemployment rate**, which is the ratio of the number of unemployed to the active population (in employment or unemployed).

A **long-term unemployed person** is a person who is seeking a job for a year or more. The **long-term unemployment rate** is the ratio of the number of long-term unemployed to the active population.

#### **ILO EMPLOYMENT**

An **employed person** as defined by the ILO is a person aged 15 or over who worked at least one hour for pay or profit during the reference week or was temporarily absent from such work (because of annual leave, sick leave, maternity leave, etc.).

The **employment rate** is the ratio of the number of people who have a job to the total population.

The **permanent employment rate (resp. fixed-term or temporary)** is the ratio of the number of people employed on a permanent contract (resp. fixed-term contract or temporary contract) to the total population.

The **full-time equivalent employment rate** is the ratio of the number of people employed, converted into full-time equivalent for their principal employment, to the total population.

The **core (or standardised) employment rate** eliminates the uneven demographic weights of age brackets covered in the employment rate. It is the arithmetic mean of employment rates by age examined.

#### **ILO ACTIVITY**

An active person as defined by the ILO is a person who is either employed or unemployed regarding ILO's definition.

The **activity rate** is the ratio of the number of people in the labour force (in employment or unemployed) to the total population.

**Active life expectancy** is the average duration of activity, in years, of a fictitious generation subjected to the conditions of activity of the period. Like the core employment rate, it is independent of demographic structure.

#### **HALO OF UNEMPLOYMENT**

The **halo of unemployment** consists of people who are inactive as defined by the ILO, but who are close to the labour market: these are people who are seeking a job but are **not available for work within two weeks**, people who want to work but who **have not been actively seeking work** in the previous month, whether they are available or not.

The halo is divided into three categories:

- people seeking a job, but who are not immediately available: indicator 1;

- people wanting to work, and who are available, but not actively seeking work: indicator 2.
- people wanting to work, but who are not available and not actively seeking work: indicator 3.

The first two of these indicators correspond to the Eurostat definition of the halo. The third, which is more removed from the labour market, refers to the definition recommended in 2008 in the context of « Emploi, chômage, précarité. Mieux mesurer pour mieux débattre et mieux agir<sup>1</sup> » a report by the National Council for Statistical Information (CNIS).

### **ILO UNDEREMPLOYMENT**

**Underemployment** covers people who are working part-time, who would like to work more and who are available for work, whether they are looking for work or not. Underemployment also includes people who have unintentionally worked less than usual, due to technical or partial unemployment, for example.

The definition of underemployment used by Eurostat does not include technical or partial unemployment and is therefore slightly more restrictive than the definition adopted by INSEE.

## **Gradual renewal of the sample from Q3 2019**

The housing sample used for the metropolitan area until early 2019 to conduct the Labour Force Survey had a lifespan of 9 years. It reached exhaustion in Q2 2019. As of Q3 2019, the incoming clusters (1/6th of the sample each quarter) are therefore drawn from a new sample. In the end, the sample from metropolitan France will be completely renewed in Q4 2020 (in the French overseas departments, the sample is drawn each year). The old and new samples have common characteristics (housing sample, areal and rotating sample in particular), but the new sample was an opportunity to make some improvements in the sampling frame and drawing method. The renewal of the sample is not supposed to affect the results of the Labour Force Survey.

## **Accuracy of the main indicators**

The continuous Labour Force Survey is conducted on a sample of households, designed to be as accurate as possible at a given cost. Results from sample surveys are estimates, subject to some uncertainty which can affect interpretations, especially for short-term comparisons.

Taking into account sampling variability, the quarterly unemployment rate can be estimated with a so-called « 95% confidence interval » of plus or minus 0.3 percentage points : when the unemployment rate is estimated at 10.0%, one can be 95% confident that its real value, which would have been measured if the survey was conducted to the entire French population, is between 9.7% and 10.3%.

Quarterly changes' accuracy of the unemployment rate is also impacted by the survey methodology. To prevent uncertainty from adding up, a rotating sampling scheme was adopted, which creates correlation between two consecutive quarterly samples. Thus, quarterly changes of the unemployment rate are also estimated with a 95% confidence interval of plus or minus 0.3 percentage points.

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<sup>1</sup> . De Foucauld J-B., Cézard M. and Reynaud M. (2008), « Emploi, chômage, précarité. Mieux mesurer pour mieux débattre et mieux agir » (*Employment, unemployment, and precariousness. Better measurement for better discussion and better action*), CNIS, Report no.108, September.  
[www.cnis.fr/files/content/sites/Cnis/files/Fichiers/publications/rapports/2008/RAP\\_2008\\_108\\_emploi\\_chomage\\_prekarite.PDF](http://www.cnis.fr/files/content/sites/Cnis/files/Fichiers/publications/rapports/2008/RAP_2008_108_emploi_chomage_prekarite.PDF)

Main indicators accuracy in Q1 2018 (non seasonally adjusted)

	Non seasonally-adjusted level (thousands)			Non seasonally-adjusted rate (%)		
		Accuracy	95 % confidence interval		Précision	95 % confidence interval
<b>Unemployment</b>	<b>2 704</b>	<b>86</b>	<b>[ 2 618 - 2 790]</b>	<b>9,3</b>	<b>0,3</b>	<b>[ 9,0 - 9,6]</b>
Men	1 395	62	[ 1 333 - 1 458]	9,3	0,4	[ 8,9 - 9,7]
Women	1 309	58	[ 1 251 - 1 366]	9,4	0,4	[ 8,9 - 9,8]
15-24 years	573	40	[ 533 - 613]	21,1	1,4	[19,7 - 22,4]
25-49 years	1 564	64	[ 1 500 - 1 629]	8,8	0,4	[ 8,5 - 9,2]
50 years or more	567	39	[ 528 - 605]	6,6	0,4	[ 6,1 - 7,0]
<b>Employment</b>	<b>25 946</b>	<b>146</b>	<b>[25 800 - 26 092]</b>	<b>65,3</b>	<b>0,4</b>	<b>[64,9 - 65,6]</b>
Men	13 423	92	[13 331 - 13 515]	68,8	0,5	[68,3 - 69,2]
Women	12 523	101	[12 422 - 12 625]	61,9	0,5	[61,4 - 62,4]
15-24 years	2 145	64	[ 2 081 - 2 210]	29,1	0,9	[28,3 - 30,0]
25-49 years	16 129	103	[16 026 - 16 231]	80,6	0,5	[80,1 - 81,1]
50-64 years	7 672	81	[ 7 591 - 7 754]	62,0	0,7	[61,4 - 62,7]
<b>Activity</b>	<b>28 642</b>	<b>133</b>	<b>[28 510 - 28 775]</b>	<b>72,0</b>	<b>0,3</b>	<b>[71,7 - 72,4]</b>
Men	14 812	80	[14 732 - 14 891]	75,9	0,4	[75,5 - 76,3]
Women	13 830	95	[13 735 - 13 925]	68,3	0,5	[67,9 - 68,8]
15-24 years	2 718	68	[ 2 650 - 2 786]	36,9	0,9	[36,0 - 37,8]
25-49 years	17 693	83	[17 610 - 17 776]	88,4	0,4	[88,0 - 88,8]
50-64 years	8 231	77	[ 8 154 - 8 308]	66,5	0,6	[65,9 - 67,1]
<b>Halo of unemployment</b>	<b>1 458</b>	<b>68</b>	<b>[ 1 390 - 1 526]</b>			
Men	639	43	[ 595 - 682]			
Women	819	48	[ 771 - 868]			
15-24 years	284	30	[ 254 - 314]			
25-49 years	790	49	[ 741 - 838]			
50 years or more	385	31	[ 354 - 417]			

Scope: population of people living in households in metropolitan France, people aged 15 years or over (unemployment, halo of unemployment) or 15-64 years (employment, activity)

Source: INSEE, Labour Force Survey

## Cessation of the non-respondents survey from 2018

Since 2007, when computing quarterly indicators from the continuous Labour force survey (LFS), INSEE has included the results of a complementary survey of non-respondents (NRS). This survey, which is specific to France, was designed to improve the LFS statistical representativeness. The non-respondents survey has been conducted for 10 years, and it now appears it has provided only few statistical benefits, because NRS's and LFS's respondents characteristics are very close. Thus, the NRS impact on main indicators is not very significant: on average between 2013 and 2016, it amounts to  $-0.06$  percentage points on the unemployment rate,  $+0.05$  percentage points on the activity rate of people aged 15-64, and  $+0.09$  percentage points on the employment rate of people aged 15-64. These impacts are well below the indicators' accuracy, which is of plus or minus 0.3 percentage points for the unemployment rate (see above).

All in all, the NRS benefits appear to be very limited, when taking into accounts the cost and constraints it imposes on the indicators computation and release calendar. In particular, as the NRS results for a given quarter are available only with a delay, they have to be predicted to calculate the indicators' first estimate, and then effectively included in the following release. This delay causes slight revisions of the main indicators each quarter.

For these reasons, from Q1 2018 onwards, the survey of non-respondents will no longer be conducted and won't be included to the LFS indicator's calculation. LFS data has been revised for the last time on May 23<sup>rd</sup> 2018, in order to include the Q4 2017 NRS. From the Q1 2018 release, no measured or predicted impact of the NRS will be included. Given its past values, the impact of the NRS cessation on main indicators will not be significant for the next LFS releases, including the transition quarter. Thus data will not be back-calculated.

The following figure presents the NRS impact on the quarterly variations of the unemployment rate, the employment rate and the activity rate :

- If the impact of NRS was included neither for Q4 2017 and nor for Q1 2018, the unemployment rate would increase by 0.3 percentage points over the quarter (column (b)), which is identical to the figure published in the February 23<sup>rd</sup> 2018 release (column (c)). Variations of the employment rate and the activity rate would also be unchanged.
- If the impact of NRS was included for Q4 2017 and Q1 2018, the unemployment rate would also increase by 0.3 percentage points over the quarter. Quarterly variations of the employment rate and the activity rate would be slightly affected.

### Non-respondents survey's impact on main indicators in Q4 2017 and Q1 2018

	Q4 2017		Q1 2018		Variations between Q4 2017 and Q1 2018		
	Including NRS	Not including NRS	Including NRS if existing	Not including NRS	Including NRS (previous situation)	Not including NRS (as from Q2 2018)	Current release
	(1)	(2)	(3)	(4)	(a)=(3)-(1)	(b)=(4)-(2)	(c)=(4)-(1)
<b>Unemployment rate</b>	8.6	8.6	8.9	8.9	0.3	0.3	0.3
<b>Employment rate (15-64)</b>	65.7	65.7	65.8	65.7	0.1	0	0
<b>Activity rate (15-64)</b>	72.0	72.0	72.3	72.2	0.3	0.2	0.2

Scope: population of people living in households in metropolitan France, people aged 15 years or over (unemployment) or 15-64 years (employment, activity)

Source: INSEE, Labour Force Survey

## Detailed documentation

- Continuous employment survey since 2003: description and methodology  
<https://www.insee.fr/en/metadonnees/source/s1061>