This methodological note describes how the negotiated wage indicator published by the Banque de France on a quarterly basis is constructed.

Contents of the negotiated wage database

The granular database used to calculate the aggregate indicator of negotiated wages contains minimum wage data for over 350 industries since 2005. Some of these industries are national (about 190 wage scales), others are regional (in particular construction, public works and quarries and metals - about 80 wage scales) and others are departmental (non-managerial metalworking - about 80 wage scales).¹ The number of employees in the market sector covered by these industries is around 13 million full-time equivalents, or around 16 million people, which represents 90% of the employees covered by an industry-level collective agreement in France. The average number of employees in an industry is 35,000, but 26 industries cover more than 100,000 employees and account for almost half of the total workforce (among the largest numbers are the technical design offices, the food trade, road transport, metalworking - management, hotels, cafés and restaurants, etc.). Furthermore, all the regional branches of the building and public works industry account for just over a million employees and the departmental branches of the non-managerial metalworking industry for about 1.5 million employees.²

For each of the industries, we know the agreed minimum wage defined for each "representative job" in the industry's job classification. The classification of representative jobs in an industry is itself the subject of industry-specific negotiation and agreement. The number and type of jobs in the classification are therefore different from one industry to another. Moreover, a job classification can be modified over time. Depending on the industry, classifications can be more or less detailed and contain greater or fewer different levels of minimum wages. On average, an industry contains 20 positions (see Gautier, 2017) and therefore a wage agreement consists of defining a minimum wage value for each of the positions in the grid. The finest unit of observation in our database is therefore the minimum wage defined at a given date for a position ("representative job") in the grid. The following table gives an example of the agreed minimum wage scale for the "hairdressing" scale defined by the agreement of 26 October 2022

¹ This figure partly takes into account the mergers and disappearances of industries in recent years. However, in the case of some mergers, separate grids have been maintained and are negotiated in a collective agreement; we have continued to monitor the different grids.

² The departmental branches of the metalworking industry will merge by 2024 and a single wage scale will apply to all of them.

Example - Hairdressing collective grid agreement of 26 October 2022 (source Legifrance)

Article 1

Minimum wages for jobs in the qualified hairdressing sector

The agreed minimum wages for employees in qualified hairdressing positions are defined as follows:

Classification	Minimum wage for 151.67 hours
Level 1 – step 1 Junior hairdresser	EUR 1,613
Level 1 – step 2 Hairdresser	EUR 1,630
Level 1 – step 3 Experienced hairdresser	EUR 1,647
Level 2 – step 1 Qualified hairdresser or expert	EUR 1,671 EUR 1,685
Level 2 – step 2 Highly qualified hairdresser or qualified expert	EUR 1,756
Level 2 – step 3 Very highly qualified hairdresser or assistant manager or highly qualified expert	EUR 1,857
Level 3 – step 1 Manager	EUR 1,991
Level 3 – step 2 Experienced manager or network facilitator	EUR 2,392 EUR 2,813
Level 3 – step 3 Highly qualified manager or experienced network facilitator	EUR 2,979 EUR 3,033

For each agreement, we collect the entire salary scale as defined in the agreement from the <u>Légifrance</u> website. In total, at the end of 2022, the database contained more than 100,000 different minimum wage values for the 354 industries whose agreements were collected between 2005 and 2022. Annually, this represents between 5,000 and 6,000 minimum wage values (this figure may vary depending on the intensity of bargaining activity).

This industry minimum wage can be defined as an hourly, monthly or annual wage, but most often the minimum wage is a gross monthly wage. Industry minimum wages are collected as they are, even if they are lower than the national minimum wage (NMW, or SMIC) or fall below it over time. When analysing the data to construct the aggregate indicator, all minimum wages

are converted into monthly wages (but without adjusting for non-compliance with the NMW in order to monitor only actually negotiated changes).

In addition to the amount of the salary, we collect the date of signature of the agreement (DD/MM/YY), and the date(s) on which the agreement takes effect (DD/MM/YY): this date is specified in the agreement, and in its absence, the month following the signature is considered; if it is specified that the agreement becomes effective on the date of administrative extension, a period of 3 months is applied.³ Some agreements take effect at several times during the year: we record minimum wage data for each of the dates on which the agreement takes effect; the database therefore contains the wage scale as defined on the first date of entry into effect and also the scale as defined on the second date... we can calculate the changes in minimum wages between two dates of entry into effect in the same agreement.

The database variables are as follows:

- Industry code (IDCC) or collective agreement;
- Identifier of representative jobs in the industry's wage scale (in the hairdressing example above: "Level 1 Step 1);
- Date of agreement (DD/MM/YY);
- Date(s) on which the agreement takes effect (DD/MM/YY);
- Minimum wage applicable on the date the agreement takes effect (hourly monthly yearly depending on the case);
- Signatory unions.

Aggregation and weighting of minimum wages and industries: construction of the negotiated wage indicator

First, data are at a quarterly frequency.⁴

Then, we build a database in which for each quarter, we enter the minimum wage for a given job in a given industry over the period Q1 2005 - today. The entry into effect of an agreement changes the minimum wage levels on that date, and the previous scale is replaced by the new negotiated scale. If there is no agreement, the minimum wages are those in effect since the last agreement. The date used to define the minimum wage is the date on which the agreement takes effect.

From this comprehensive database of minimum wages in effect in a given quarter, we calculate for each minimum wage in each industry the year-on-year change in minimum wages (Q/Q-4). It is equal to 0 if there was no agreement between the two dates considered and a percentage not equal to 0 if an agreement took place between Q-4 and Q.

Next, we calculate the average annual change in the industry by weighting each minimum wage according to its share in the industry wage distribution. To do this, we use the wage structure published by DARES for each of the industries in France: this structure is defined for 12

³ It should be noted that, at the time of the agreement, only companies that are members of the employers' federations that signed the agreement are obliged to apply the agreement, but all companies must do so as soon as the agreement is extended administratively by the Department of Labour. There is usually a period of two to three months between the date of signature and registration of the agreement and the date of extension.

⁴ If the agreement is to take effect over several months with various minimum wage increases in the same quarter, which is rare, we only use one starting date for a given quarter.

different relative wage levels with reference to the NMW (less than 1.05 NMW, between 1.05 and 1.1 NMW... more than 5 NMW) and if for a relative level, we have several minimum wages, the structure is uniformly distributed over these different minimum wages. This calculation gives the year-on-year change in industry wages for a given industry in a given quarter.

The aggregate France indicator is calculated by weighting each industry by its share in the economy. To do this, we use the number of full-time equivalent employees in each of the industries available on an annual basis, either from the data published by DARES (from the annual declaration of social data (DADS)) or from DADS sources directly when the information is missing for certain smaller industries or for regional industries or industries with sectoral breakdowns (road transport, for example, which is broken down into four sub-industries (goods, passengers, ambulance and road haulage))

The published indicator is the weighted average of the year-on-year changes of each industry weighted by its number of employees.

References

S. Avouyi-Dovi, D. Fougère and E. Gautier (2010), <u>Les négociations salariales en France: une analyse à partir de données d'entreprise (1994-2005)</u>, *Economie et Statistique*, No. 426, pp 29-65.

D. Fougère, E. Gautier, and S. Roux, (2018), <u>Wage Floor Rigidity in Industry-Level</u> <u>Agreements: Evidence from France</u>, *Labour Economics* vol. 55, pp 72-97.

E. Gautier (2017), <u>Les salaires minima de branche en France</u>, *Revue Française d'Économie*, *vol 32*.