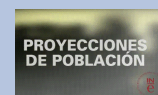
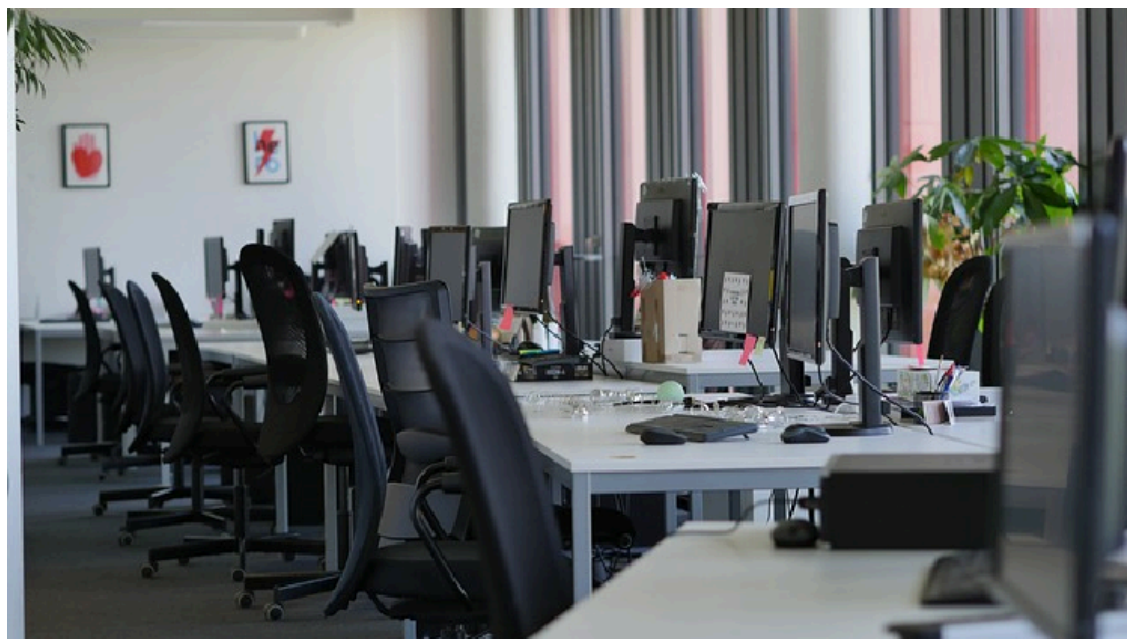


Videos



Job Vacancy Statistics in Spain and the EU

Employment offers from the Quarterly Labour Cost Survey (QLCS)



In this number...

Importance of Job vacancies in Economic Analysis

Some Results on Job vacancies in Spain

Results on Job vacancies at European Level

Relationship Between Unemployment and Job Vacancy Rate in the EU

The Future of Job vacancy Statistics

Information on the number of job vacancies can be used as an indicator of the business cycle as well as to assess mismatches between labour supply (employed and unemployed people on the one hand) and labour demand (occupied and vacant jobs in companies on the other).

Job vacancies provide information on unmet labour demand. Job vacancy statistics are part of the set of Principal European Economic Indicators for the Monitoring of the European Employment Strategy and the guidelines for Member States' employment policies. For the preparation process, Member States must follow the guidelines set out in two regulations:

-**Framework Regulation** laying down the requirements for compiling quarterly statistics on job vacancies in the European Union.

-**Implementing Regulation** implementing the terms of the Framework Regulation.

A job vacancy is defined in the European Framework Regulation a paid post that is newly created, unoccupied, or about to become vacant for which:

- the employer is taking active steps and is prepared to take further steps to find a suitable candidate from outside the enterprise concerned,
- and which the employer intends to fill immediately or within a specific period of time.



The study of job vacancies is of particular importance in labour market analysis, as it can be interpreted as an indicator of the relative tension between labour supply and demand.

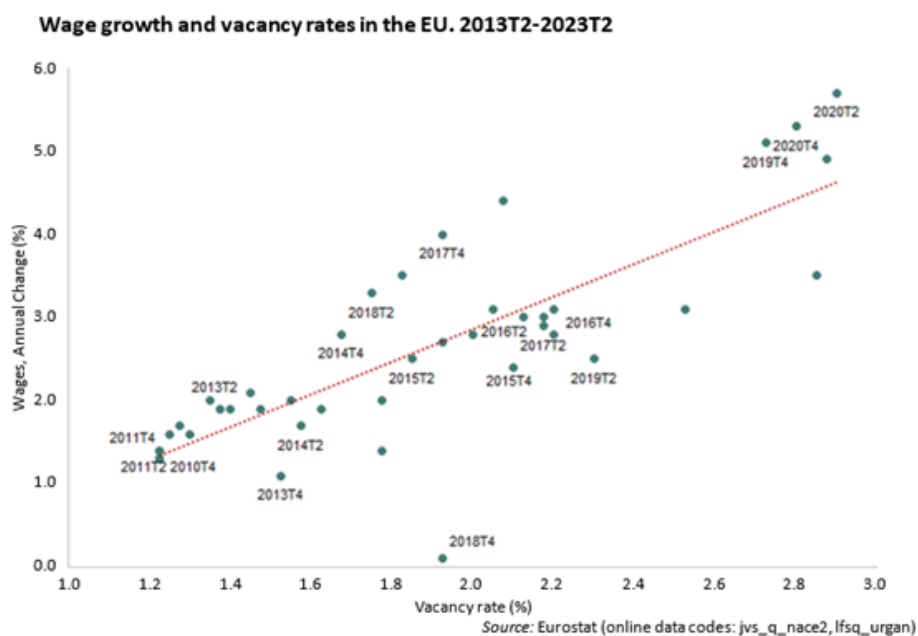
Job vacancies represent the unmet demand for labour in the form of jobs that are available to be filled. The existence of job vacancies means that employers (companies and institutions) need a workforce, which they can only obtain if there are enough workers with the necessary skills to fill these jobs and who are willing to take them. If there are too many vacancies, or if vacancies take too long to fill, there will be a mismatch between the skills and availability of workers and the needs of employers.

The number of job vacancies is also an indicator of the economic situation: increases in job vacancies anticipate growth in economic activity, while decreases point to an economic slowdown.

Job vacancies can also be linked to wage behaviour. An increase in the unsatisfied demand for labour can put upward pressure on wages.

For example, looking at the relationship between the job vacancy rate¹ and the annual growth rate in wages in the European Union, the link between the two indicators can be seen.

1. The job vacancy rate is the quotient of the number of vacancies (numerator) and the sum of total employment and vacancies (denominator).



Sources of Information on Job vacancies

As with all statistics, several sources can be identified for obtaining data on the number of job vacancies: publicly available sources, administrative files and surveys.

The main source of public data on available job posts could be the data collected by Public Employment Services². In Spain, information on job posts could be obtained from the Public State Employment Service (SEPE) as well as from the employment services of the Autonomous Communities, but registration is not compulsory, so this administrative source alone would not be sufficient for a proper count of job vacancies. Public Employment Services also provide a website for employers to advertise their vacant jobs and for workers to search for the most suitable positions.

The main source for the official measurement of job vacancies in Spain is currently the Quarterly Labour Cost Survey (QLCS). This survey responds to the European requirements on the subject, as set out in the two regulations mentioned above.

The last section of the QLCS questionnaire asks for the number of job vacancies on the last day of the reference month of the data. The definition of a job vacancy is the same as in the European regulation and is explicitly stated in the questionnaire.

The QLCS thus meets the requirements of the European Regulation, which proposes as preferred methods either continuous data collection or the calculation of a representative average of data collected on specific reference dates. In our case, the data for the last days of each of the three months of the reference quarter are averaged.

2. In some European countries, such as Belgium, companies are obliged to register their vacancies with the Public Employment Service, so this administrative data are used as the main source of their statistics.

F. Vacantes u ofertas de empleo

Indique el número de vacantes u ofertas de empleo en su centro. Se entiende como vacante u oferta de empleo el puesto de trabajo creado recientemente, o no ocupado, o que está a punto de quedar libre, para el cual el empresario está tomando medidas activas al objeto de encontrar un candidato idóneo ajeno a la empresa. Si no le es posible obtener el dato de vacantes asociadas a la cuenta de cotización, anótelo referido a la totalidad de la empresa. Indique a qué colectivo se refiere en cualquier caso. Las medidas activas incluirán, entre otras: publicar la vacante en los medios de comunicación (por ejemplo Internet, periódicos, revistas), notificar la vacante de empleo a los servicios públicos de empleo, recurrir a una agencia de colocación, ponerse en contacto, entrevistarse o realizar un proceso con posibles candidatos, etc.

F1. Vacantes u ofertas de empleo al final del mes de referencia

0

 De la cuenta de cotización De la empresa**F2. Si no existe ninguna vacante u oferta de empleo en su centro, indique el motivo:**

- 1. No se necesita ningún trabajador más
- 2. Elevado coste de contratación
- 3. Falta de demandantes con la cualificación y formación adecuada
- 4. Otros (Especificar):



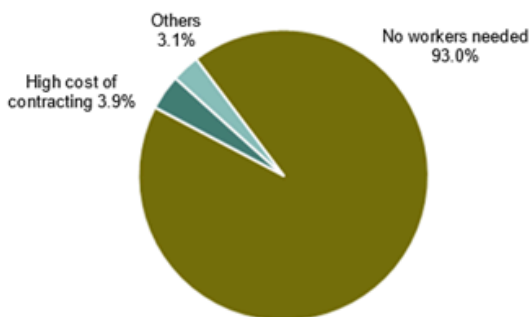
Looking at the evolution of the number of QLCS job vacancies from the first quarter of 2019 to the fourth quarter of 2023, one can observe the effect of the COVID-19 pandemic, which had a significant impact in 2020, when the number of vacancies fell as a result of the downturn in economic activity. From the first quarter of 2021, the number of vacancies gradually recovered and is now above pre-pandemic levels. In the last quarter of 2023, the number of vacancies stood at 139,314.

Evolution of the number of vacancies in Spain
Thousands



With data as of the fourth quarter of 2023, the main reason for companies to report having no job vacancies is simply because they do not need more workers (93.0%). The second reason, with 3.9% of cases, is the high cost of recruitment, and other reasons account for 3.1%. The distribution by sector of reasons for not having job vacancies is very similar, although the high cost of recruitment shows a higher share in Construction (5.1%) than in the other sectors.

Reasons why there are no vacancies
Fourth quarter 2023



Reasons why there are no vacancies. Fourth quarter 2023

| | Total vacancies | Percentage | Reasons why there are no vacancies (percentage distribution) | | | |
|--------------|-----------------|------------|--|-------------------|--------------------------|-------|
| | | | Total | No workers needed | High cost of contracting | Other |
| TOTAL | 139,314 | 100.0 | 100.0 | 93.0 | 3.9 | 3.1 |
| Industry | 9,322 | 6.7 | 100.0 | 92.9 | 3.7 | 3.4 |
| Construction | 6,311 | 4.5 | 100.0 | 90.6 | 5.1 | 4.3 |
| Services | 123,680 | 88.8 | 100.0 | 93.3 | 3.8 | 2.9 |

Comparing job vacancies by size of establishment between 2014 and 2023, there is stability in the proportion of vacancies required by companies with more than 200 employees – almost a third of all vacancies. Small companies (1 to 49 employees) have accounted for only 34.2% of vacancies in 2023, down from more than 50% in 2014. This decline has been absorbed by medium-sized companies (50 to 199 employees) whose relative importance in the number of job vacancies rises from 16.9% in 2014 to 31.8% in 2023.

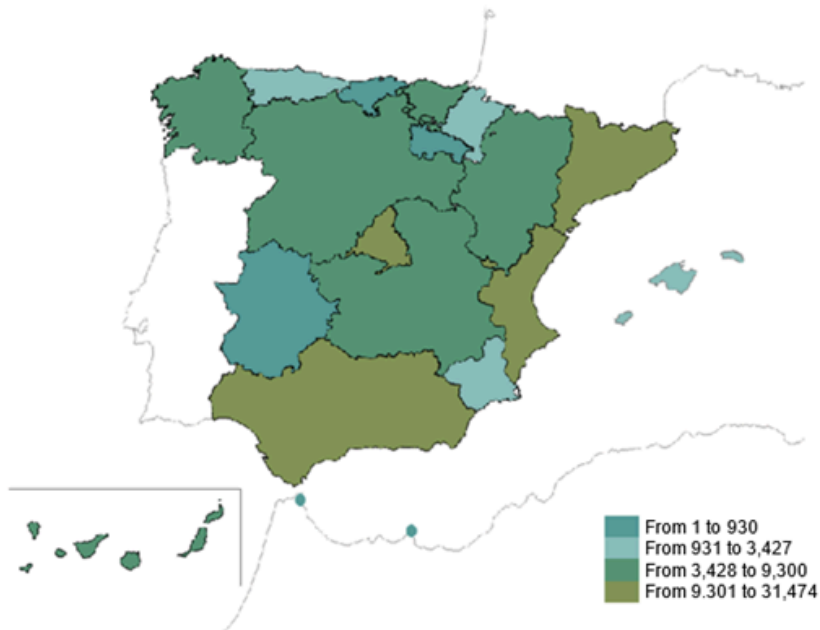
Percentage of vacancies by size of establishment



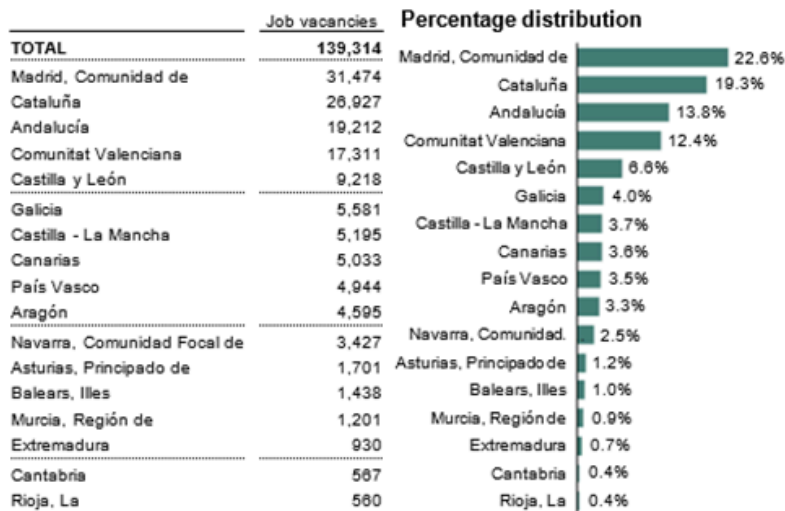
Job vacancies by Autonomous Community

Looking at job vacancies by Autonomous Community, it can be seen that they are naturally concentrated in the regions with the highest population and economic activity. Comunidad de Madrid, Cataluña and Andalucía account for 55.7% of the total number of job vacancies recorded by the survey in the fourth quarter of 2023. Other Autonomous Communities with smaller populations, such as Castilla y León, Galicia and Castilla-La Mancha, reflect to a lesser extent the effects of the unsatisfied labour demand already mentioned.

Vacancies by Autonomous Community
Fourth quarter 2023



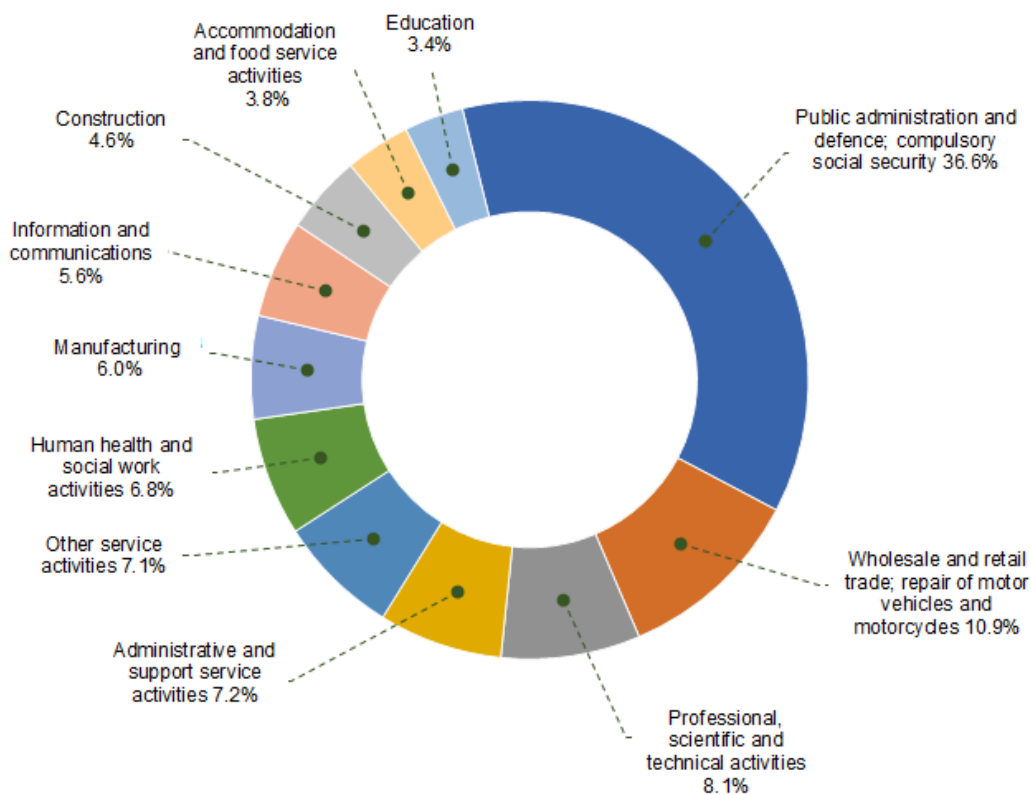
Percentage distribution of job vacancies by Autonomous Community.
Fourth quarter 2023



Job vacancies by economic activity

The structure of labour demand can be further analysed by looking at the number of job vacancies and their evolution by economic sectors. The highest share of job vacancies (36.6%) is concentrated in *Public Administration and Defence; Compulsory Social Security*, which includes most of the jobs posted by the public sector. This is followed by *Wholesale and Retail Trade; Repair of Motor Vehicles and Motorcycles* (with 10.9% of vacancies) and *Professional, Scientific and Technical Activities* (with 8.1%).

Job vacancies by economic activity
Fourth quarter 2023



Comparing the data for the fourth quarter of 2023 with the same period of the previous year, we observe a slight decrease (0.9%) in the total number of job vacancies. By economic activity, the largest increase was in *Construction*, which grew by 67.9% and accounted for 4.6% of total vacancies. The number of job vacancies also rose sharply in *Accommodation and food service activities*, with an increase of 26.2%, followed by *Financial and Insurance Activities* with 25.4%. On the other hand, job vacancies fell by 36.1% in *Human health and social work activities* and by 26.8% in *Arts, entertainment and recreation*.

Job vacancies by economic activity

Fourth quarter of 2023 compared to the fourth quarter of 2022

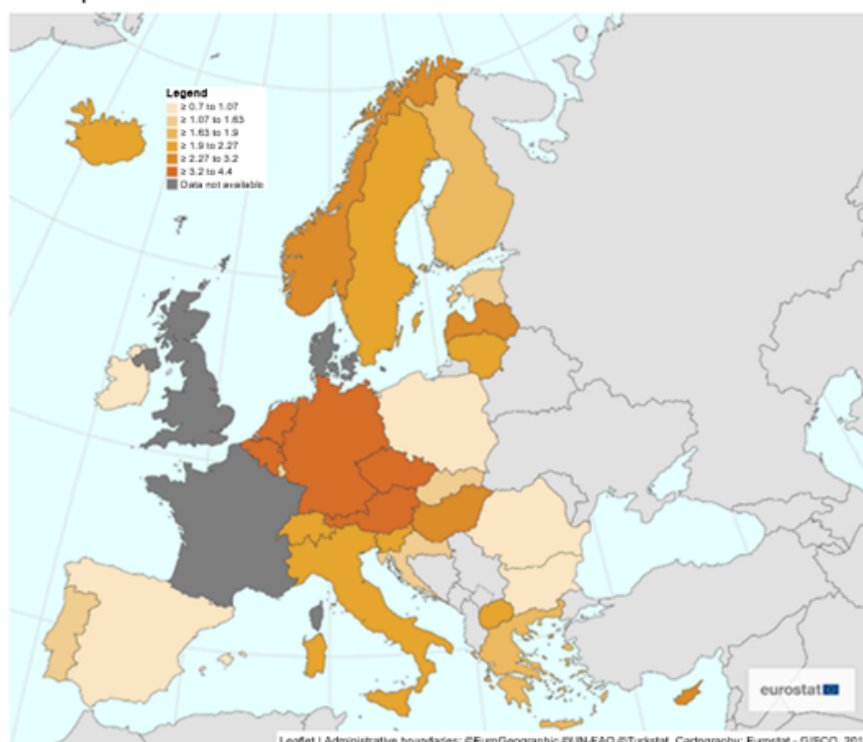
| Activity branch | 2023T4 | 2022T4 | Percentage change in the number of job vacancies |
|---|---------|---------|--|
| F Construction | 6,311 | 3,759 | 67.9 |
| I Accommodation and food service activities | 5,239 | 4,152 | 26.2 |
| K Financial and insurance activities | 1,579 | 1,259 | 25.4 |
| M Professional, scientific and technical activities | 11,179 | 9,870 | 13.3 |
| C Manufacturing | 8,274 | 7,429 | 11.4 |
| H Transport and storage | 3,776 | 3,464 | 9.0 |
| G Wholesale and retail trade; repair of motor vehicles and motorcycles | 15,051 | 14,259 | 5.6 |
| J Information and communication | 7,820 | 7,551 | 3.6 |
| B_S Industry, construction and services (excluding activities of households as employers and activities of extraterritorial organisations and bodies) | 139,314 | 140,517 | -0.9 |
| O Public administration and defence, compulsory social security | 50,707 | 51,426 | -1.4 |
| S Other service activities | 1,936 | 1,981 | -2.3 |
| E Water supply, sewerage, waste management and remediation | 878 | 908 | -3.3 |
| N Administrative and support service activities | 9,937 | 10,780 | -7.8 |
| P Education | 4,746 | 5,624 | -15.6 |
| R Arts, entertainment and recreation | 1,597 | 2,181 | -26.8 |
| Q Human health and social work activities | 9,486 | 14,835 | -36.1 |

Eurostat publishes quarterly and annual data on the number of job vacancies. However, the data provided by some EU Member States do not meet the common criteria, leading to differences in coverage between countries. As a consequence, Eurostat does not publish data on total vacancies at European level, but does publish data for countries that provide harmonised data. As an example of some differences between countries, the data provided by Denmark refer only to NACE Sections B to N and not to the broader aggregate of NACE Sections B to S used for the other Member States. Similarly, the data provided by France and Italy refer only to companies with 10 or more employees, rather than the broader aggregate of all companies used for the other States. Work is underway to eliminate or reduce these differences in coverage through regulatory review. In view of these comparability problems, Eurostat has chosen to describe the vacancy phenomenon by focusing on the job vacancy rate, which measures the proportion of job vacancies with respect to total jobs, expressed as a percentage:

$$\text{JVR} = (\text{number of job vacancies}) / (\text{number of occupied posts} + \text{number of job vacancies}) * 100$$

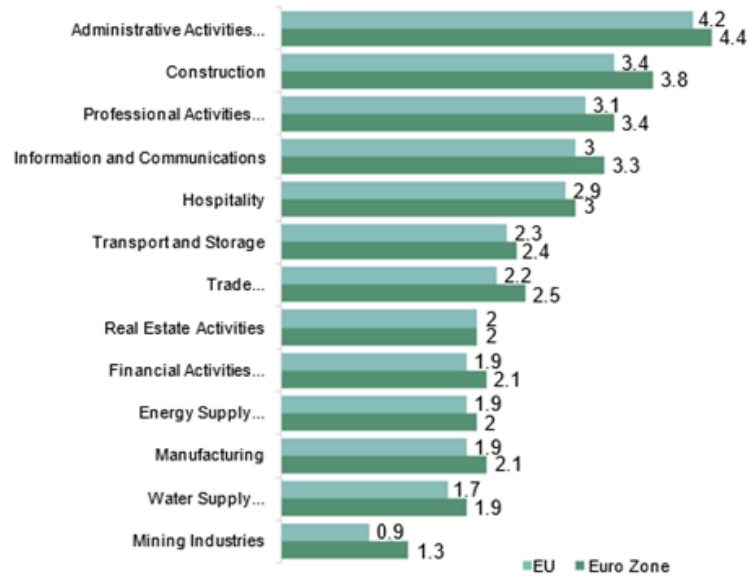
In the fourth quarter of 2023, the job vacancy rate in the EU was 2.5%, compared with 2.6% in the previous quarter and 2.8% in the fourth quarter of 2022.

Vacancy rate by country
Fourth quarter 2023



By economic activity, the highest job vacancy rates in the fourth quarter of 2023 in both the EU and the Euro Zone were recorded for *Administrative and Support Services Activities* (4.4% in the Euro Zone, 4.2% in the EU), *Construction* (3.8% in the Euro Zone, 3.4% in the EU), *Professional, Scientific and Technical Activities* (3.4% in the Euro Zone, 3.1% in the EU), *Information and Communications* (3.3% in the Euro Zone, 3.0% in the EU) and *Accommodation and food service activities* (3.0% in the Euro Zone, 2.9% in the EU).

Vacancy rate by economic activity section. European Union and Euro Zone
Percentage



Source: Eurostat



To analyse the relationship between unemployment and job vacancies in the EU, we can use the so-called Beveridge curve, which is a graphical representation of the negative relationship between unemployment and the job vacancy rate. Fluctuations in aggregate demand generate movements along the curve. During contractions there are few job vacancies and high unemployment, while during expansions there are more job vacancies and a lower unemployment rate.

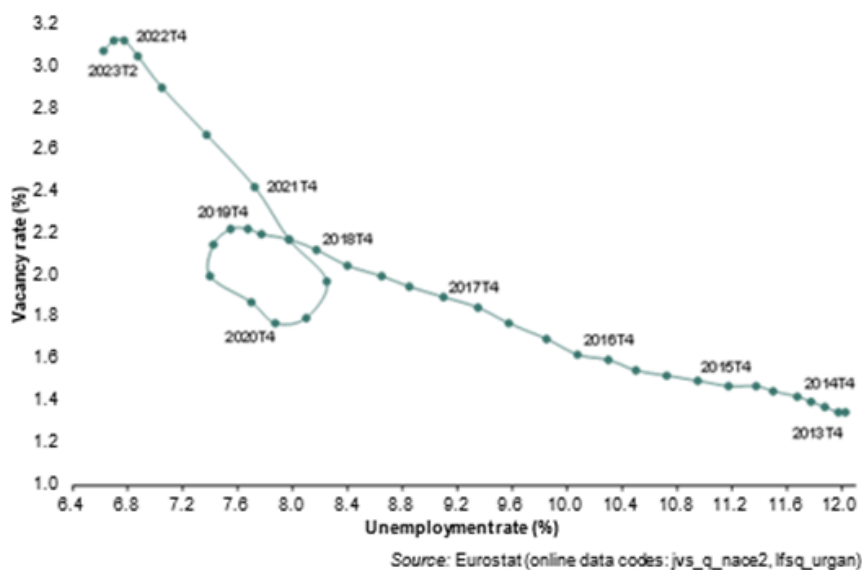
Structural changes in the economy can lead to shifts in the Beveridge curve. An upward shift in the curve reflects lower labour market efficiency, as for the same unemployment rate, there are more not-filled job vacancies. Conversely, a downward shift in the curve is associated with an improvement in labour market efficiency due, for example, to a better flow of information about job vacancies thanks to new technologies such as the Internet. More 'structurally', the shift of the curve towards areas of higher efficiency may be a response to an improvement in the skills of the workforce, allowing a better match with the skills required by employers.

If we plot the job vacancy and unemployment data for the last 10 years, we can see that from the fourth quarter of 2013 onwards, there are shifts along the curve towards situations of higher activity (lower unemployment and more vacancies).

The curve describes a striking 'loop' associated with the COVID-19 crisis. Job vacancies first fall in 2020 and then return to pre-pandemic levels by the end of 2021. All this with a limited impact on the unemployment rate. This would suggest that labour markets recovered quickly from the COVID-19 crisis with no impact on the overall matching between labour supply and demand.

From the third quarter of 2021 onwards, a further increase in job vacancy rates is observed, but with a poorer matching. The curve becomes more inelastic and increases in job vacancies lead to smaller reductions in unemployment. The last few quarters reflect a behaviour contrary to that postulated by the Beveridge curve, with job vacancies and unemployment falling simultaneously. It is still too early to assess where this behaviour could lead, but it may anticipate a shift in the curve, this time towards areas of higher efficiency.

Beveridge curve for the EU
2013Q4 to 2023Q2. Four Quarter Averages



The future of job vacancy statistics lies collecting data from online job advertisements to complement the information currently obtained through surveys. The problem of using web content is twofold: On the one hand, the lack of homogeneity in the definitions, descriptions and characteristics of the online jobs advertisements and, on the other hand, the existence of duplication, i.e. the same online job advertisement on several platforms. Despite these problems, the use of bulk data from websites for statistical purposes is becoming increasingly common.

Some positive aspects of online job advertisements are that they provide a greater level of detail than other sources of information. For each job vacancy, we can obtain information about the job title, location, salary range offered, skills required and whether the job is face-to-face, teleworking or hybrid. The immediacy and detail of online data is valuable not only for monitoring labour demand, but also for assessing the impact of public policies on the labour market.

The collection of data from websites can be done through the platforms' own APIs³ or through techniques such as web scraping, which allows automatic access to the web by simulating a user's query through agreements with the providers of the relevant portals.

Eurostat, in cooperation with the European Centre for the Development of Vocational Training (CEDEFOP), has been working for some time to collect information on online job advertisements. The data is accurately captured through web crawling techniques or direct access via one of the APIs mentioned above.

As a result of analysing this data referred to 2022, the latest publication, we can show the 10 most frequent occupations sought in online job advertisements, according to the International Standard Classification of Occupations (ISCO) at the four-digit level.

3. API stands for Application Programming Interface. A set of routines that provides access to the functions of a particular piece of software to perform an action or access a feature or content provided by the site.

10 most common occupations on online job search platforms. 2022
Percentage



Source: Eurostat (Web Intelligence Hub)

The skills most in demand by employers are also analysed using natural language models. In a word cloud for the 10 most frequent skills sought in online job advertisements, we can see the skills most valued or insisted upon by employers.

Top skills in the 10 most common occupations. 2022



The full report on this data is available at this [link](#)

The INE is studying this line of research to complete and improve the current vacancy statistics in Spain.