



Zeszyt metodologiczny

Popyt na pracę

Methodological report
The demand for labour



Zeszyt metodologiczny

Popyt na pracę

Methodological report

The demand for labour

Urząd Statystyczny w Bydgoszczy Statistical Office in Bydgoszcz

Bydgoszcz, Warszawa Bydgoszcz, Warsaw 2024

Opracowanie merytoryczne

Content-related works

Urząd Statystyczny w Bydgoszczy
The Statistical Office in Bydgoszcz

Zespół autorski

Author team

Pracownicy Urzędu Statystycznego w Bydgoszczy oraz Głównego Urzędu Statystycznego
Employees of the Statistical Office in Bydgoszcz and Statistics Poland

Kierujący

Supervisor

Wiesława Gierańczyk

Tłumaczenie

Translation

Zbigniew Osypiuk

Zeszyt metodologiczny zaopiniowany przez Komisję Metodologiczną Głównego Urzędu Statystycznego

Methodological report approved by Statistics Poland Methodological Commission

Publikacja dostępna na stronie internetowej:

Publication available on website:

<https://stat.gov.pl/>

Przy publikowaniu danych GUS prosimy o podanie źródła

When publishing Statistics Poland data – please indicate the source

Metadata

| | |
|---|---|
| Title of the methodological report | Methodological report. The demand for labour |
| Author | Statistical Office in Bydgoszcz |
| Statistical units of the survey/area | <ul style="list-style-type: none"> national economy entities conducting economic activity within the scope of PKD/NACE sections from A (excluding natural persons running individual farms) to S (with the exception of division 94, i.e. entities conducting economic activity in the field of activities of member organisations), according to local units, in which the number of employees is at least 1 person |
| Scope of data of the survey/area | <ul style="list-style-type: none"> the number of occupied jobs (occupied posts) and job vacancies, including newly created jobs |
| The type and method of the survey/area | <ul style="list-style-type: none"> sample survey sampling according to a stratified sampling scheme using the Base of Statistical Units |
| Data collection tools/data sources | <ul style="list-style-type: none"> dataset (electronic form) Z-05 on the Reporting Portal |
| Presentation of the survey/area results | https://stat.gov.pl/obszary-tematyczne/rynek-pracy/ |
| Classifications used | Classification of Occupations and Specialisations https://stat.gov.pl/Klasyfikacje/doc/kzs/kzs_pp.htm Polish Classification of Activities PKD 2007 – consistent with NACE Rev.2 https://stat.gov.pl/Klasyfikacje/doc/pkd_07/pkd_07.htm |
| Date of preparation of the methodological report | October 2019, December 2021 (update), May 2024 (update) |

Contents

| | |
|---|----|
| Metadata | 3 |
| List of main abbreviations | 5 |
| Introduction | 6 |
| Objective of the survey | 7 |
| 1. Statistical units and scope of data in the survey | 8 |
| 1.1. Statistical units | 8 |
| 1.3. Historical overview and changes in the Labour Demand Survey | 8 |
| 2. Type and method of the survey | 10 |
| 2.1. Method of the survey and the reference period | 10 |
| 2.2. Sampling | 10 |
| 2.3. Precision of data | 11 |
| 3. Characteristics of data collection tools | 12 |
| 3.1. Methods of collecting data in the survey | 12 |
| 3.2. Survey tools | 12 |
| 4. Variables in the survey – main measures and indicators | 13 |
| 4.1. Variables in the survey | 13 |
| 4.2. Definitions of basic terms used in the Labour Demand Survey | 14 |
| 4.3. Basic indicator calculated with the use of the survey results | 15 |
| 4.4. Classifications | 15 |
| 5. Organisation of the survey – the method of collecting data | 16 |
| 5.1. Obligation to participate in the survey | 16 |
| 5.2. Frequency of conducting the survey | 16 |
| 5.3. Statistical confidentiality | 16 |
| 5.4. Units of official statistics conducting the survey | 16 |
| 5.5. Data collection process | 16 |
| 5.6. Compiling data collected in the survey | 17 |
| 6. Method of presenting the results | 18 |
| 6.1. Basic results obtained from the survey | 18 |
| 6.2. Limitations pertaining to publishing the results | 19 |
| 6.3. Rules on access to data | 19 |
| 6.4. Use of the results and data users | 19 |
| 7. Evaluation of the survey – preliminary assessment of survey quality and data reliability | 20 |
| 7.1. Response rate (survey completeness) | 20 |
| 7.2. Quality assessment of the survey | 20 |
| List of legal acts in force relating to job vacancy statistics in the European Union. | 21 |
| Appendix No 1. Changes in the methodological report | 22 |

List of main abbreviations

| Abbreviation | Full name |
|--------------|---|
| BJS | Base of Statistical Units |
| ESS | European Statistical System |
| Eurostat | the Statistical Office of the European Union |
| GUS | Statistics Poland |
| ISCO | International Standard Classification of Occupations |
| JVR | Job Vacancy Rate |
| JVS | Job Vacancy Statistics |
| NACE | Statistical Classification of Economic Activities in the European Community |
| PBSSP | Statistical survey programme of official statistics |
| PKD | Polish Classification of Activities |
| UE | European Union |

Introduction

The Labour Demand Survey is one of the surveys conducted by Statistics Poland, the results of which allow for an ongoing assessment of the use of jobs, and at the same time allow for a wider description of reporting units with breakdowns by location, ownership sector, kind of activity and their size measured in terms of the number of employed persons.

The Labour Demand Survey, conducted with the use of the Z-05 reporting form, collects data on the number of occupied jobs and job vacancies that may be useful for planning and implementing socioeconomic policy at the regional and national scales. The subject matter of the survey is part of the broad range of labour market research topics, which include, inter alia, employed persons, earnings, working time and labour costs. The said topics are interrelated and the results of surveys carried out complement one another.

The Labour Demand Survey has been conducted using the representative method on a quarterly basis since 2007 and covers entities of the national economy and their local units with at least one employee. The reporting unit is understood as an entity of the national economy and/or its local unit, which, in accordance with the survey methodology, has been qualified to provide data for statistical purposes. The information obtained from this survey relates to the met labour demand and unmet labour demand, expressed in the number of occupied and vacant jobs broken down by occupation and data on the number of newly created and liquidated jobs in a reference period.

Following the accession of Poland to the European Union, the data from this survey became the basis for the calculation of the job vacancy rate, which is important for comparisons at the international, national and regional levels.

The legal basis for conducting the survey is the Act of 29 June 1995 on Official Statistics (Journal of Laws (Dz.U. 2023, item 773 as amended) and the Regulation of the Council of Ministers concerning the Statistical survey programme of official statistics (PBSSP) for a given year. Considering that the survey fulfils obligations arising out of the membership in the European Union, it also meets requirements stipulated in EU legal acts regulating job vacancy statistics (JVS). The basic legal act introducing the Labour Demand Survey is the Regulation (EC) No 453/2008 of the European Parliament and of the Council of 23 April 2008 on quarterly statistics on Community job vacancies, accompanied by additional implementing acts¹ and recommendations containing rules and guidelines concerning the methods of conducting the survey or the required precision of results. Compliance with the guidelines contained in EU regulations ensures that the survey provides data that enable users to make comparisons within the EU.

The publication consists of seven chapters. Initial chapters present the objective of the survey, the legal basis, statistical units and scope of data in the survey, as well as the organisation of the survey. Then, issues related to the broadly understood methodology of the Labour Demand Survey are described and the method of presenting the results and making them available is discussed.

¹ The list of applicable legal acts concerning job vacancy statistics (JVS) in the European Union is at the end of the report.

Objective of the survey

The main objective of the Labour Demand Survey is to collect data on the number of occupied jobs and job vacancies, including newly created jobs and job vacancies reported to labour offices. The results of the survey are presented with breakdowns by occupational group (major and sub-major), kind of activity (sections and divisions of PKD/NACE), ownership sector, macroregion and region. Such way of presenting data allow for the monitoring of the directions of changes taking place in the met labour demand (occupied jobs) and unmet labour demand (job vacancies), and also to calculate labour market indicators, including those used for international comparisons.

1. Statistical units and scope of data in the survey

1.1. Statistical units

The general population consists of entities of the national economy and their local units with 1 or more employees, conducting economic activity in the scope of PKD/NACE sections from A (excluding natural persons running individual agricultural holdings) to section S (with the exception of division 94, i.e. Activities of membership organisations). Entities that do not employ any employees remain outside the scope of the survey. Hence, a sampling frame, i.e. the list of general population elements being the subject of statistical observation, includes entities of the national economy and their local units employing 1 or more persons. From the moment these entities are selected and the reporting obligation arises, the term reporting units is used in relation to them.

1.2. Scope of data

The subject of the survey are changes in the number of occupied jobs and job vacancies, including newly created ones.

The number of employed persons is the measure of occupied jobs. Whenever the survey variable 'employed persons' (the number of employed persons) appears, it should be understood as the number of occupied jobs.

The survey collects the following data:

- Total employed persons (occupied jobs) – as of the last day of the quarter, including:
 - women – as of the last day of the quarter,
- Job vacancies – as of the last day of the quarter, including:
 - newly created – as of the last day of the quarter,
 - job vacancies reported to labour offices and remaining unoccupied – as of the last day of the quarter,
- Newly created jobs, from the beginning of the year to the end of the reference quarter,
- Liquidated jobs, from the beginning of the year to the end of the reference quarter,
- Disabled employed persons (jobs occupied by disabled persons), as of the last day of the quarter, including:
 - those at workstations specially adapted to the needs resulting from the disability – as of the last day of the quarter.

1.3. Historical overview and changes in the Labour Demand Survey

Statistics Poland was surveying the demand for labour in units with 50 and more employees since 1995. In 1998, for the first time, the survey covered units with 10 to 49 employees.

In 2005, the scope and methodology of surveying job vacancies were uniformed in the European Union countries. Therefore, the survey in Poland was adapted to the requirements of Eurostat. Among other things, the coverage of statistical units was significantly extended (instead of the survey limited to the enterprise sector), the frequency increased. From this year, the survey is conducted on a quarterly basis (not at a biennial frequency as before), but the scope of data was limited. In 2007, the survey was adapted to the new EU requirements,

which are currently regulated by legal acts concerning job vacancy statistics (JVS). From this year on, the survey is representative and covers entities of the national economy and their local units with 1 or more employees. Since 2009, the Labour Demand Survey has collected information on the number of liquidated jobs, and from 2018 on job vacancies reported to labour offices.

2. Type and method of the survey

2.1. Method of the survey and the reference period

The survey covers a representative part of the population, i.e. a random sample consistent with the adopted methodology, allowing for the generalisation of the survey results to the general population.

The subjects of the survey are entities of the national economy and their local units, which allows for the presentation of the obtained results according to the actual spatial distribution of jobs.

In the survey, most of the information is obtained as of the last day of the quarter, only some variables (newly created and liquidated jobs) refer to the entire reference quarter (from the beginning to the end), but then it is clearly indicated in the wording of the question (No 3 and 4).

2.2. Sampling

In the Labour Demand Survey, carried out using the representative method, stratification of the general population is applied, i.e. separate subpopulations of units are distinguished, in which samples are drawn independently (this is the so-called stratified sampling scheme).

The sample for the survey is drawn separately for units with 10 or more employed persons and for units with up to 9 employed persons.

Separate sampling for these two parts of the surveyed population is justified by a slightly different objective of the survey for each of them.

With regard to units with 10 or more employed persons, the objective of the survey is to obtain information for individual kinds of activity (PKD/NACE sections) by voivodship, which is achieved by distinguishing 304 separate subpopulations. The allocation of a sample of a predetermined size (approximately 38 thousand) between individual subpopulations is carried out in a way that allows for obtaining approximately the same precision level of the survey results for these subpopulations. Within each of the subpopulations the units are sorted in descending order by the number of employed persons. With the use of the numerical optimisation method, the sample of a predetermined size is divided into subpopulations, and a threshold for the number of employed persons is set for each of the 304 strata. The largest units from each subpopulation with more employed persons than the established threshold are included in the survey without drawing. From the remaining parts of individual subpopulations, samples of a predetermined size are drawn. Before the drawing, these parts of individual subpopulations are divided into strata of equal size and then proportional allocation is made in the created strata. The number of strata of equal size created in the undertreshold parts of individual subpopulations is defined as the reciprocal of the fraction of units drawn from these parts.

As regards units with up to 9 employed persons, the main objective of the survey is to obtain precision that allows for publishing the results for 19 PKD/NACE sections. Therefore, the allocation of the sample of a predetermined size (38 thousand units) is made between individual PKD/NACE sections in such a way that the expected precision for these sections is approximately the same. Within the section, the units are stratified by voivodship, then the sample is drawn according to a proportional stratified sampling scheme.

The drawn sample is used in all quarterly surveys in a given year. When generalising the results of the survey, information on the probability of selection of each entity of the national economy or its local unit, as well as response rates for particular populations and the reasons for non-response are taken into account.

The adopted survey methodology limits the possibility of presenting data below the voivodship level.

2.3. Precision of data

The precision of data obtained from a sample survey, which is the Labour Demand Survey, is assessed on the basis of the analysis of sampling and non-sampling errors. Reducing and eliminating these errors contribute significantly to the improvement of data quality.

Sampling errors are related to the sample size and sampling scheme. Their essence lies in the fact that the lack of complete information on a phenomenon results in the lack of certainty as to the accuracy of the estimates obtained from a sample survey.

Sampling errors include inter alia over-coverage errors (5-15%) and are related to the level of up-to-dateness of the Base of Statistical Units (BJS), which is the sampling frame. In order to reduce sampling errors, inactive units identified during the survey are reported to the BJS resources.

The results of this survey are rough estimates of the value of an unknown population parameter. Therefore, on the one hand, one should be aware of the bias of the results (i.e. the difference between the value obtained from the sample and the actual value, occurring in the population, which can be determined only after conducting a census), and on the other hand, select the sample in such a way that these differences are as small as possible.

The basic information on the relative standard error as the main measure of the precision of the survey for the Labour Demand Survey is presented in the annual publication, in the table titled Estimates of the relative standard errors of estimators for selected results of the Labour Demand Survey.

3. Characteristics of data collection tools

3.1. Methods of collecting data in the survey

The Labour Demand Survey is conducted with the use of the Z-05 form, which is transmitted mainly electronically through the Reporting Portal of Statistics Poland.

Data are collected as of the last day of the reference quarter (occupied jobs and job vacancies, including newly created ones, as well as those reported to labour offices) and from the beginning of the year to the end of the reference quarter (liquidated and newly created jobs).

3.2. Survey tools

The Labour Demand Survey is conducted mainly through the Reporting Portal of Statistics Poland with the use of an electronic form (on-line). It is possible to participate in the survey with the use of paper forms. This solution is dedicated only to units with up to 5 employed persons which do not have an account on the Reporting Portal.

Employees of the Statistical Office in Bydgoszcz provide all necessary assistance in completing the reports, also by phone.

The form of 'the Labour Demand Survey' report, marked with the symbol Z-05 is available on the website of Statistics Poland at the address: <https://form.stat.gov.pl/formularze/formularze.htm>.

4. Variables in the survey – main measures and indicators

4.1. Variables in the survey

The scope, wording and structure of the questions on the Z-05 form are derived from the set of variables in job vacancy statistics (JVS) of the European Union and also result from the needs of national data users.

Variables included on the Z-05 form

The main part of the Z-05 form is divided into 3 sections:

- section 1 contains basic data on the surveyed unit:
 - symbol of the predominant kind of activity according to PKD/NACE,
 - the status of legal and economic activity on the last day of the reference quarter (active or inactive entity),
- section 2 includes data:
 - filter question – dichotomous question: Where there any employed persons in the unit on the last day of the reference quarter? Choosing the ‘yes’ field results in moving to the next point of section 2, if you choose the ‘no’ field, please provide an explanation.
 - total number of employed persons, including women, broken down by sub-major occupational group as of the last day of the reference quarter,
 - the number of newly created jobs in the period from the beginning of the year to the end of the reference quarter,
 - the number of liquidated jobs in the period from the beginning of the year to the end of the reference quarter,
 - filter question – dichotomous question: Were there any job vacancies in the unit on the last day of the reference quarter? Choosing the ‘yes’ field results in moving to the next point in section 2, while choosing the ‘no’ field will move you to section 3,
 - total number of job vacancies, including newly created ones and job vacancies reported to labour offices, broken down by sub-major occupational group as of the last day of the reference quarter,
- section 3 includes complementary information:
 - the number of disabled employed persons as of the last day of the reference quarter,
 - the number of disabled persons working at workstations specially adapted to the needs resulting from their disability as of the last day of the reference quarter,
 - the enterprise’s interest in increasing the employment of disabled persons.

At the beginning of the form, basic information about the unit should be provided, which is necessary to conduct the survey and then create a database with its results.

The form ends with questions about the time spent on preparing and filling in the data, which are used to estimate the burden on respondents in relation to the reporting obligation.

4.2. Definitions of basic terms used in the Labour Demand Survey

Demand for labour – it is the number of jobs that the economy offers under certain socio-economic conditions.

Market mechanisms have a huge impact on the relationship between the labour supply and labour demand. The demand side is more dynamic and therefore more vulnerable on the impact of these mechanisms. The size and structure of the demand for labour depends on many factors, including the demand for products and services, the economic condition of the enterprise, and labour costs. The system of equilibrium between both these elements is the most beneficial for the economy.

The jobs offered by the economy constituting **the demand for labour are divided into:**

1. Occupied jobs, equal to the current number of employed persons,
2. Vacant jobs – the number of job vacancies.

The measure of occupied jobs is the number of employed persons, i.e. all persons employed on the basis of an employment relationship (including seasonal and casual workers), outworkers, agents in all agency systems (including persons employed by agents), owners and co-owners and members of agricultural production cooperatives, i.e. persons remaining in the records of the surveyed unit on a specific date (regardless of whether the reporting unit is their main place of work).

Job vacancies – positions or jobs unoccupied due to labour turnover or newly created ones that simultaneously meet the following three conditions:

1. The positions and jobs were actually unoccupied on the survey day,
2. The employer made efforts to find people willing to take up the job,
3. If adequate candidates were found to occupy the vacancies, the employer would readily take them on.

Job vacancies reported by the employer to labour offices – are job vacancies that were reported by the employer to the labour office in order to find a suitable employee, and remain actually unoccupied on the reporting day.

Newly created jobs – jobs created as a result of organisational changes, expanding or changing business profile, and all jobs in newly established units.

Liquidated jobs – jobs liquidated as a result of organisational changes, limiting or changing business profile.

Reporting unit (abbreviated: unit) – an entity of the national economy and/or its local unit that transmits data for statistical purposes.

Local unit – an organised whole (plant, branch, subsidiary) located in a place identified with a separate address, at or from which the activity is conducted by at least one employed person.

Numerical optimisation consists in determining the numerical values of a set of parameters by finding the minimum or maximum of a specific objective function, dependent on these parameters, using the available numerical/computational methods. The optimisation used in the sample allocation for the Labour Demand Survey is described in Kozak M., 'Optimal stratification using random search method in agricultural surveys', *Statistics in Transition*, Vol. 6, No. 5, 2004, pp. 797-806.

Proportional allocation – sample allocation (stratified sampling) is that each stratum has a representation proportional to its share in the population (Bracha Cz., *Teoretyczne podstawy metody reprezentacyjnej*, PWN, Warszawa 1996, p. 108).

Sample allocation – in individual strata (stratified sampling), the researcher decides how many units from each stratum should be drawn for the sample (Bracha Cz., *Teoretyczne podstawy metody reprezentacyjnej*, PWN, Warszawa 1996, p. 108).

4.3. Basic indicator calculated with the use of the survey results

The measure of the unmet labour demand is the job vacancy rate, which shows the proportion of vacant jobs compared to total jobs (vacant and occupied).

The job vacancy rate (JVR) is therefore calculated as the share of job vacancies in the sum of occupied jobs and job vacancies.

$$JVR = \frac{JV}{O+JV} * 100\%$$

where:

JVR – job vacancy rate

JV – the number of job vacancies

O – the number of occupied jobs

4.4. Classifications

Classifications used in the Labour Demand Survey:

1. Data concerning occupational groups are compiled according to **the Classification of Occupations and Specialisations 2014** currently in force. This classification was introduced by the Regulation of the Minister of Labour and Social Policy of 7 August 2014 (Journal of Laws 2022, item 853 as amended) and prepared on the basis of the ISCO-08 classification.
2. Information on entities of the national economy by kind of activity is presented according to **the Polish Classification of Activities 2007** introduced by the Regulation of the Council of Ministers of 24 December 2007 (Journal of Laws 2023, item 2668 as amended) on the Polish Classification of Activities. The PKD 2007 classification was prepared on the basis of the NACE Rev. 2 classification.

5. Organisation of the survey – the method of collecting data

5.1. Obligation to participate in the survey

The Labour Demand Survey, in accordance with Art. 30 and 30a of the Act on Official Statistics, is an obligatory survey. It covers approximately 75 thousand drawn units. The drawing is based on the Base of Statistical Units, including local units.

5.2. Frequency of conducting the survey

The Labour Demand Survey is conducted on a quarterly basis, while the sample is drawn once a year, and the units selected for the survey are required to submit reports for all quarters of a given year.

5.3. Statistical confidentiality

Employees of official statistics services conducting and supervising the Labour Demand Survey are obliged, pursuant to Art. 10 of the Act of 29 June 1995 on Official Statistics, to keep information obtained from units in response to all questions contained in the survey form confidential.

The article reads as follows: Identifiable individual data collected in statistical surveys are strictly protected. These data may be used only for studies, compilations and statistical analyses as well as for the preparation of a sampling frame by the President of Statistics Poland; sharing or using this data for purposes other than those specified in the Act is prohibited (statistical confidentiality).

5.4. Units of official statistics conducting the survey

Beginning from the first quarter of 2019, the work related to the preparation and IT support is managed by the Statistical Office in Bydgoszcz. The survey is prepared in cooperation with the Programming and Coordination of Statistical Surveys Department of Statistics Poland.

The IT support for the survey is provided entirely by the Statistical Office in Bydgoszcz.

5.5. Data collection process

Gathering data as part of the survey is preceded by the preparation of appropriate survey tools and the creation of a list containing data on reporting units. The preparation of tools for the survey is carried out by the Statistical Office in Bydgoszcz in cooperation with the Programming and Coordination of Statistical Surveys Department of Statistics Poland.

The Statistical Office in Bydgoszcz, using the Sample Generator, develops an algorithm for the selection of the list of surveyed units, on the basis of which the further stages of the organisation of the survey are carried out (the structure of the list of surveyed units, sampling frame structure). In the Sample Generator, the sampling frame is created, from which the units that make up the sample are drawn. The list of surveyed units, once approved in the Sample Generator, is placed on the Reporting Portal of Statistics Poland.

Data collection from reporting units is carried out mainly through the Reporting Portal of Statistics Poland.

5.6. Compiling data collected in the survey

Data collected in a given quarter are subject to ongoing control. Data control in the electronic form is carried out on the basis of the assumptions for the logical and arithmetic control for the on-line form prepared once a year at the Statistical Office in Bydgoszcz. Once the application is tested (in accordance with the schedule for the survey conducted on the Z-05 form), possible corrections are made. In the next stage, the control is carried out by the survey coordinators at the Statistical Office in Bydgoszcz – the correctness and completeness of information are checked, and the calculated control tables are also analysed. The tables accepted by the Office are the basis for the compilation of the national data set for a given quarter. Once the data set is controlled and the control tables compiled on the basis of nongeneralised data are approved, the Programming and Coordination of Statistical Surveys Department develops the weights necessary to generalise the survey results to the general population. The weights are the reciprocal of the probabilities of selection of units for the sample and are included in the set of individual data. Next, the weights are adjusted taking into account the presence of refusals, lack of contact and units outside the scope of the survey in the surveyed sample. Then, the control tables are prepared again on the generalised data. Their acceptance allows for the preparation of the output information for a given quarter, as well as for the preparation of, inter alia, a set of non-identifiable individual data, which at a later stage is made available to key users.

In each quarter, the following sets of results tables are prepared:

- tables transmitted to Eurostat,
- generalised nationwide tables,
- tables with the survey results for the voivodships.

6. Method of presenting the results

6.1. Basic results obtained from the survey

The Labour Demand Survey allows for the assessment of the labour market situation, taking into account:

- territorial division,
- ownership sectors,
- kinds of activities,
- sizes of entities of the national economy,

and characteristics of employed persons (the met labour demand):

- occupation,
- sex,
- disability.

The output information for a given quarter is disseminated and made available in news releases titled The demand for labour and Socio-economic situation of the country.

The results for a given year are published in the study Demand for labour, which is issued within 6 months after the last quarter of the reporting year. The publication includes data for the quarters and the dynamics in relation to the previous quarters in a given year. Starting from 2016, tables containing annual and average annual data (average over all quarters) for Poland in various cross-sections are also published. They are available on the website of Statistics Poland in Excel format.

The number of employed persons obtained in the Labour Demand Survey illustrates occupied jobs, i.e. the level of met labour demand and cannot be equated with the number of employed persons in the national economy.

The survey results are also available in the following databases:

- Local Data Bank,
- Strateg.

In addition, the results of the Labour Demand Survey are published in collective publications of Statistics Poland, such as:

- Statistical Yearbook of the Republic of Poland,
- Yearbook of Labour Statistics,
- Statistical Yearbook of the Regions – Poland,
- Statistical Yearbook of Industry – Poland,
- Regions of Poland.

6.2. Limitations pertaining to publishing the results

When publishing data from the Labour Demand Survey, limitations resulting from the adopted survey method are taken into account. Lowest available aggregation level for:

- administrative division is voivodship,
- occupations – is a major occupational group (single digit code), and for the occupations for which the assumed precision was achieved, data are also published for sub-major occupational groups (2-digit code),
- kind of activity according to PKD/NACE classifications – sections (single-character alphabetical code) and selected divisions (2-digit code).

The results of the Labour Demand Survey are presented in thousands with an accuracy of one decimal place.

6.3. Rules on access to data

The data collected in the Labour Demand Survey are made available in accordance with all the rules applicable to official statistics in this regard. Equal and simultaneous access to the output statistical information, in particular to the basic figures and indicators is provided under the Act on Official Statistics. The data collected and stored in the survey are confidential and are subject to special protection. These data may be used only for studies, compilations and statistical analyses, and their sharing or use for purposes other than those specified above is prohibited (statistical confidentiality). Individual data are particularly protected. They are collected from reporting units, but after the collection is completed, the database is stripped of the variables that enable identification of the units and is further processed as a set of non-identifiable individual data.

Data from the Labour Demand Survey are made available primarily in the form of generalised, aggregated output information. The Act on Official Statistics in special cases allows for the possibility of disclosing non-identifiable individual data, e.g. for research conducted by scientific centres or analyses conducted by public administration bodies (Article 13, paragraph 6 of the Act on Official Statistics). Pursuant to Art. 21a of the aforementioned Act, quarterly sets of non-identifiable individual data are also transferred to the National Bank of Poland as part of cooperation between the President of Statistics Poland and the President of the National Bank of Poland.

6.4. Use of the results and data users

The Labour Demand Survey provides quarterly statistics on job vacancies. The JVR determined on the basis of these data is used to monitor and evaluate the effectiveness of actions taken in the field of labour market policy. The data from this survey are the basis for many decisions – they are used by the most important national and international institutions, mainly by the European Commission, including Eurostat, the European Central Bank, the Chancellery of the Prime Minister, ministries and central offices, the National Bank of Poland, universities and research institutions, and the media.

7. Evaluation of the survey – preliminary assessment of survey quality and data reliability

7.1. Response rate (survey completeness)

The completeness of the survey, understood as the survey response rate, is subject to constant monitoring. For this purpose, among other things, the following parameters are used for checking survey completeness: number of units that participated in the survey (completed the report) and the number of units that did not respond to the survey. The reasons for nonresponse are also analysed. They are as follows: inactivity (seasonal character of activity, the activity has not been started yet or the entity is in organisation, in suspension, in liquidation or bankruptcy, liquidated entity), refusal to complete the report, random event, lack of contact, inactivity of the unit at the time of conducting the survey.

Non-response monitoring results are included in the calculation of weights when generalising the survey results to the general population.

7.2. Quality assessment of the survey

Annual national reports and annual quality reports submitted to Eurostat are prepared for the purposes of assessing the quality of the survey. Reports are prepared after the end of the survey for a given year on dates specified by Eurostat (European reports) and the Statistical Office in Łódź (national reports).

The national annual report consists of several parts, each devoted to the analysis of a selected quality component. Each report contains: component description, quality measurement (quality assessment measures), conclusions improving the quality in a given component. The quality dimensions assessed are: data relevance, data accuracy, timeliness and punctuality of data, accessibility and clarity, comparability, coherence, cost and burden on respondents, confidentiality, transparency and data security. The report also includes a summary, which presents proposals for enhancing the quality of selected areas which need improvement. The structure of the quality report is adjusted to the ESS standards, and the obligation to prepare them is specified in the Internal regulation of the President of Statistics Poland No 35 of 28 December 2011 on measuring, evaluating and monitoring the quality of statistical surveys in official statistics services.

The annual report for Eurostat is also prepared in accordance with the ESS quality report structure standard, and the quality assessment is performed within the same quality dimensions as in the case of the national report. In the quality reports for Eurostat, countries only briefly refer to selected components of the survey quality, i.e. relevance, accuracy, timeliness, accessibility and clarity, comparability and coherence of data. Providing quality reports of the survey to Eurostat is carried out on the basis of the Regulation of the European Parliament and of the Council (EC) No 453/2008, supplemented by the Commission Regulation (EC) No 1062/2008.

List of legal acts in force relating to job vacancy statistics in the European Union

The main legal act

1. Regulation (EC) No 453/2008 of the European Parliament and of the Council of 23 April 2008 on quarterly statistics on Community job vacancies (OJ L 145/234);

Implementing acts

1. Regulation (EC) No 1062/2008 of 28 October 2008 implementing Regulation (EC) No 453/2008 of the European Parliament and of the Council on quarterly statistics on Community job vacancies, as regards seasonal adjustment procedures and quality reports (OJ L 285/3);
2. Commission Regulation (EC) No 19/2009 of 13 January 2009 implementing Regulation (EC) No 453/2008 of the European Parliament and of the Council on quarterly statistics on Community job vacancies, as regards the definition of a job vacancy, the reference dates for data collection, data transmission specifications and feasibility studies (OJ L 9/3).

Appendix No 1. Changes in the methodological report

| Year | Chapter no in the edition of changes made | Chapter no in the newest edition | Description of the change made |
|------|---|----------------------------------|---|
| 2019 | | | the first version of the methodological report |
| 2021 | | | uniformisation of terms used in the report – consolidation of the following terminology: <ul style="list-style-type: none"> • ‘occupied jobs’ and ‘job vacancies’ • ‘reporting unit’ and ‘entities of the national economy and their local units’ • ‘units with up to 9 employed persons’, ‘units with 10 to 49 employed persons’, ‘50 or more employed persons’ |
| 2024 | 2.2 | 2.2 | on page 10, a change in the sample size for units with 10 or more employed persons from ‘approximately 50 thousand’ to ‘approximately 38 thousand’ |
| 2024 | 2.2 | 2.2 | on page 10, a change in the sample size for units with up to 9 employed persons from ‘approximately 50 thousand’ to ‘approximately 38 thousand’ |
| 2024 | 5.1 | 5.1 | on page 16, the sample size for the survey changed from ‘100 thousand’ to ‘75 thousand’ units |
| 2024 | | | Preface on page 3 was deleted |
| 2024 | | | Metadata added on page 3 |