JOB VACANCY STATISTICS 2018

NATIONAL REFERENCE METADATA IN SINGLE INTEGRATED METADATA STRUCTURE (SIMS)

CONCEPT 1 - CONTACT

Sub-Concept 1.1: Contact organisation

National Statistics Office (NSO)

Sub-Concept 1.2: Contact organisation unit

Labour Market Statistics Unit

Sub-Concept 1.3: Contact name

Christabel Tartaglia

Sub-Concept 1.4: Contact person function

Senior Statistician

Sub-Concept 1.5: Contact mail address

National Statistics Office (NSO),
Lascaris, Valletta VLT 2000, Malta.

Sub-Concept 1.6: Contact e-mail address

christabel.tartaglia@gov.mt

Sub-Concept 1.7: Contact phone number

+356 2599 7663

CONCEPT 2 – METADATA UPDATE

Sub-Concept 2.1: Metadata last certified

19th December 2019.

Sub-Concept 2.2: Metadata last posted

24th September 2019.

Sub-Concept 2.3: Metadata last update

24th September 2019.

CONCEPT 3 – STATISTICAL PRESENTATION

Sub-Concept 3.1: Data description

Job Vacancy Statistics (JVS) provide information on the level and structure of labour demand. The country transmits to Eurostat the quarterly data on the number of job vacancies and the number of occupied posts; as well as provides the quality report under the JVS framework regulation and the two implementing regulations:

1. The Implementing Regulation on the definition of a job vacancy, the reference dates for data collection, data transmission specifications and feasibility studies;

2. The implementing regulation on seasonal adjustment procedures and quality reports.

The national Job Vacancy Survey is carried out using a sample survey amongst private enterprises, whilst administrative data are used with regards to public entities. Since 2017 the target population has been extended to include units employing 1 or more (full-time and part-time) persons and operating under NACE Rev.2 Sections B-S.

Data are collected on a quarterly basis where enterprises are asked to provide the number of employed persons and the number of active vacancies as at the 30th day of the end of quarter month. To date, the survey's results are not published at a national level, however the main results derived from this data collection are published by Eurostat and may also be provided by NSO upon request. As of yet, the NSO only transmits information relating to units employing 10 or more persons. The basic statistical unit for the data collection is the enterprise.

Sub-Concept 3.2: Classification system

A number of classifications are applied to this survey. These include NACE Rev 2, ISCO 08 (the International Standard Classification of Occupations) and NUTS (the Nomenclature of Territorial Units for Statistics).

Sub-Concept 3.3: Sector coverage

JVS covers enterprises which employ 1 or more (both full-time and part-time) and operating under NACE Rev2. Sections: B-S.

Sub-Concept 3.4: Statistical concepts and definitions

The three main concepts used in the JVS are 'Job Vacancy', 'Job Vacancy Rate' and 'Occupied Post'.

Job vacancy - is defined as a newly created, unoccupied, or about to become vacant post:

1. For which the employer is taking active steps to find a suitable candidate from outside the enterprise concerned;
2. Which the employer intends to fill either immediately or in the future.

Note also that under this definition, a job vacancy should be open to candidates from outside an enterprise. However, this does not exclude the possibility of the employer recruiting an internal candidate for the post. A vacant post that is open only to internal candidates should not be treated as a job vacancy.

Job Vacancy Rate (JVR)- measures the proportion of total posts that are vacant, according to the definition of job vacancy, expressed as a percentage as follows:

JVR = Number of job vacancies *100 / (number of occupied posts + number of job vacancies)

Occupied post - is a post within an organisation to which an employee has been assigned.

Sub-Concept 3.5: Statistical unit

The basic statistical unit for the data collection is the enterprise.

Sub-Concept 3.6: Statistical population

The target population is made up of entities which employ 1 or more (full-time and part-time) employees and operating under NACE Rev2. Sections: B-S.

Sub-Concept 3.7: Reference area

Results are produced at country level (NUTS 2).

Sub-Concept 3.8: Time coverage

A time series of data is available as from Q1 of 2010.

Sub-Concept 3.9: Base period

Not applicable.

CONCEPT 4 – UNIT OF MEASURE

The number of occupied posts, and the number of vacancies which were active on a reference date during the reference quarter, are expressed in units while the Job Vacancy Rate (JVR) is expressed in percentage (%) form.

CONCEPT 5 – REFERENCE PERIOD

The JVS collects vacancies whose call for application is still open during the reference date on a quarterly basis. The reference year is that of 2018.

CONCEPT 6 – INSTITUTIONAL MANDATE

Sub-Concept 6.1: Legal acts and other agreements

The Malta Statistics Authority (MSA) Act empowers the NSO to collect, compile, extract and release official statistics related to demographic, social, environment, economic and general activities and conditions of Malta.

The JVS data collection is being carried out under European Regulation (EC) No 453/2008 of the European Parliament and of the Council of 23 April 2008 on quarterly statistics on Community job

vacancies. Seasonal adjustment procedures and quality reports are fixed by 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.

Sub-Concept 6.2: Data sharing

Data are only disseminated to Eurostat.

CONCEPT 7 - CONFIDENTIALITY

Sub-Concept 7.1: Confidentiality – Policy

At National level:

The NSO requests information for the compilation of official statistics according to the articles of the MSA Act – Cap. 422 and the Data Protection Act – Cap. 586 of the Laws of Malta implementing the General Data Protection Regulations (GDPR).

Article 40 of the MSA Act stipulates the restrictions on the use of information while Article 41 stipulates the prohibition of disclosure of information. Furthermore, Section IX of the Act (Offences and Penalties) lays down the measures to be taken in case of unlawful exercise of any officer of statistics regarding confidentiality of data.

Since its inception, the NSO has always assured that all data collected remains confidential and that it is used for statistical purposes only according to the articles and derogations stipulated in the laws quoted above. The Office is obliged to protect the identify of data providers and refrain from divulging any data to third parties that might lead to the identification of persons or entities.

During 2009, the NSO has set up a Statistical Disclosure Committee to ensure that statistical confidentiality is observed, especially when requests for microdata are received.
Upon employment, all NSO employees are informed of the rules and duties pertaining to confidential information and its treatment. In line with stipulations of the MSA Act, before commencing work, every employee is required to take an oath of secrecy whose text is included in the same Act.

An internal policy on anonymisation and pseudo-anonymisation is in place to ascertain that adequate methods are used for the protection of data which the office collects and shares with the public in its capacity as the National Statistics Office. The policy is meant to safeguard confidentiality of both personal and business data entrusted to the NSO. The document provides guidance for all NSO employees who process data on a daily basis as to how anonymisation and pseudo-anonymisation methods should be applied. The policy applies to all confidential, restricted and internal information, regardless of form (paper or electronic documents, applications and databases) that is received, processed, stored and disseminated by the NSO.

At European level:

Regulation (EC) No 223/2009 on European statistics (recital 24 and Article 20(4) of 11 March 2009 (OJ L 87, p. 164), stipulates the need to establish common principles and guidelines ensuring the confidentiality of data used for the production of European statistics and the access to those confidential data with due account for technical developments and the requirements of users in a democratic society.

Sub-Concept 7.2: Confidentiality – Data Treatment

Micro-data is not made available outside the NSO. In addition, aggregate data are flagged as confidential on the basis of:
- Minimum frequency count (i.e. counts based on less than 3 readings are not published)
- The applicable dominance rule.

CONCEPT 8 – RELEASE POLICY

Sub-Concept 8.1: Release Calendar

Not applicable. No news releases on JVS are published.

Sub-Concept 8.2: Release Calendar access

Not applicable. No news releases on JVS are published.

Sub-Concept 8.3: User access

An internal policy on dissemination is in place to govern the dissemination of official statistics in an impartial, independent and timely manner, making them available simultaneously to all users.

The NSO's primary channel for the dissemination of official statistics is the NSO website. Tailored requests for statistical information may also be submitted on the NSO website through: https://nso.gov.mt/en/Services/Pages/Request-for-Information.aspx.

Moreover, JVS data can be accessed from Eurostat's website through https://ec.europa.eu/eurostat/web/labour-market/job-vacancies/database.

CONCEPT 9 – FREQUENCY OF DISSEMINATION

Data on vacancies are not released at a national level. National results are transmitted to Eurostat on a quarterly basis, that is, 70 days after the end of quarter.

CONCEPT 10 – ACCESSIBILITY AND CLARITY

Sub-Concept 10.1: News release

No news release on JVS has ever been published at a national level.

Sub-Concept 10.2: Publications

No publication on JVS has ever been published at a national level.

Sub-Concept 10.3: Online Database

No information on JVS is included in the StatDB, however, JVS data can be accessed from the Eurostat's online database.

Sub-Concept 10.4: Micro-data access

No access to micro data is available.

Sub-Concept 10.5: Other

Any requests can be made online through:
http://nso.gov.mt/en/Services/Pages/Request-for-Information.aspx

Sub-Concept 10.6: Documentation on methodology

Work processes and procedures for the compilation of Job Vacancy Statistics are documented in a standardised reporting template and aligned to the GSBPM model. The model covers all phases of the statistical production process, from the initial stages of identifying what statistics are needed and the scope of the particular survey, to the final stages of dissemination and evaluation. GSBPM is only available internally and may be accessed by all NSO employees.

The JVS is carried out as per (EC) Regulation 19/2009 and Implementing (EC) Regulation 453/2008.

Sub-Concept 10.6.1: Metadata completeness rate

Information about all required metadata concepts (and sub-concepts thereof) are provided.

Sub-Concept 10.7: Quality Documentation

The procedures used for the analysis of data are documented in line with the GSBPM model and made available to NSO staff members only.

A quality report is sent to Eurostat on an annual basis.

The NSO has developed an internal Quality Management Framework (QMF) which is built on common requirements of the ESS Code of Practice (ESS CoP). A document was prepared to include a set of general quality guidelines spanning over all statistical domains. Assuring methodological soundness is an integral part of the QMF, nonetheless, the document spans also on other areas related to institutional aspects.

CONCEPT 11 – QUALITY MANAGEMENT

Sub-Concept 11.1: Quality Assurance

Information pertaining to quality criteria used for the JVS is worked out on an annual basis. Quarterly checks are carried out in order to ensure that information received for both employment and vacancies is consistent. This is done by checking that the information provided for a specific quarter follows previous trends. Any queries which arise during the data collection phase are addressed directly to the company and necessary changes are carried out.

Every five to seven years, the NSO participates in a Peer Review exercise through which the compliance of its operations with principles of the ESS CoP is assessed by an expert team. Peer Reviews are indeed part of the European Statistical System (ESS) strategy to implement the ESS CoP. Each NSI is expected to provide information as requested by a standard self-assessment

questionnaire. Following this an expert team visits the office to meet NSI representatives and main stakeholders. Peer Reviews result in a compliance report and the listing of a set of Improvement Actions which need to be followed up by the NSI. The next round of Peer Reviews is planned to be carried out in 2022.

Sub-Concept 11.2: Quality Assessment

A number of checks are carried out on a quarterly basis in order to ensure both consistency and good quality. Checks are carried out to ensure consistency in employment levels with previous quarters. In cases of large discrepancies, the enterprise is re-contacted either via telephone or e-mail in order to provide us with the reason as to why such change occurred. In cases were no specific reason is provided by the enterprise, employment figures are cross-checked with Josbplus employment levels. Jobsplus employment levels are used as benchmarks when imputations are required.

Quarterly vacancies are compared to the list of job vacancies advertised with Jobsplus during the reference quarter. In tur, Jobsplus vacancies are used as a benchmark to impute and ensure consistency between both sources.

In view of the checks made every quarter, data quality is deemed to be good.

CONCEPT 12 - RELEVANCE

Sub-Concept 12.1: User needs

Main users of this data include:

1. International organisations (such as Eurostat, UNESCO (United Nations Educational, Scientific and Cultural Organization), OECD (Organisation for Economic Co-operation and Development), EU's Directorate General for Employment),
2. Public Entities (such as Ministries and Authorities),
3. Private entities (research organisations, unions, businesses), and
4. The General Public.

Although the data are generally required for policy making purposes and to forecast job vacancy trends, they are also sought for market research purposes.

Sub-Concept 12.2: User satisfaction

The last User Satisfaction Survey was held in 2014 with the aim to collect information about key users' satisfaction with statistical output.

The NSO keeps record of the number of News Releases and publications disseminated on its website; the users to whom statistical products are provided; as well as the number of requests that are processed every year.

News Releases and tailor-made statistical outputs were assessed on account of their quality, timeliness, and on their ability to meet users' needs.

Sub-Concept 12.3: Data Completeness

In 2009, the Office conducted a feasibility study related to the coverage of NACE sections O, P and Q, and it was concluded that given that the majority of units operating in this sector are public owned, most of the data would be available through the use of administrative sources. As a result, the feasibility study concluded that it would be feasible to carry out the survey with NACE sections O, P and Q.

The data completeness rate stands at 100%. All the necessary information is collected and compiled for Eurostat. Such information may be downloaded from Eurostat's website.

CONCEPT 13 – ACCURACY AND RELIABILITY

Sub-Concept 13.1: Overall accuracy

The coefficient of variation (CV) is calculated on the total number of vacancies based on the employment size of the enterprise. The outcome results to be low, as indicated in the table below:

	CV
Q1	3.5
Q2	2.7
Q3	3.3
Q4	4.0

Sub-Concept 13.2: Sampling errors

Estimates with a percentage margin of error greater than 30% are normally omitted from tables which are disseminated to Eurostat, as these represent highly volatile and unreliable survey estimates. Other estimates with a relatively high but acceptable margin of error are flagged accordingly. The sampling error shown in the below table was calculated on the total number of vacancies as per reference date based on the employment size of the enterprise within the private sector. Public sector entities were omitted from the calculation since information relating to both employment and vacancies is attained through administrative sources.

	Q1	Q2	Q3	Q4
B	Not applicable - N < 30)	Not applicable - N < 30)	Not applicable - N < 30)	Not applicable - N < 30)
C	7.4	8.0	9.1	8.6
D	Not applicable - N < 30)	Not applicable - N < 30)	Not applicable - N < 30)	Not applicable - N < 30)
E	Not applicable - N < 30)	Not applicable - N < 30)	Not applicable - N < 30)	Not applicable - N < 30)
F	20.9	17.6	11.9	12.3
G	8.1	7.6	9.6	8.6
H	3.1	6.6	8.5	7.4
I	9.0	4.9	6.8	11.0
J	12.6	9.3	13.1	7.5
K	14.9	14.4	11.4	14.1
L	21.4	30.3	21.6	24.9

M	12.0	8.5	9.3	12.9
N	10.7	16.2	15.9	15.1
O	0.0	0.0	0.0	0.0
P	11.2	12.4	7.0	10.0
Q	10.3	10.3	4.9	13.4
R	8.1	12.0	13.6	13.6
S	28.2	36.6	20.3	38.9

Sub-Concept 13.3: Non-sampling error

Main sources of non-sampling error relate to coverage, measurement and processing errors. Further information is provided in sub concepts 13.3.1 and 13.3.2.

Sub-Concept 13.3.1: Coverage error

Coverage errors in the JVS relate to:

1) Units which were deemed to be in operation during the reference period, but were actually found to have ceased operation when contacted to carry out the JVS;

2) Misclassification of economic activity of sampled units

Sub-Concept 13.3.1.1: Over Coverage

In 2018, the national JVS was conducted amongst units employing 1 or more employees, hence, the over-coverage refers to units which were believed to have employees but were either self-employed or inactive.
The quarterly rate for 2018 is provided below:
Q1: 6.5%
Q2: 5.8%
Q3: 6.6%
Q4: 6.5%
Annual Average: 6.4%

Sub-Concept 13.3.1.2: Common Units Proportion

0.6% of units in the sample are also covered by administrative sources.

Sub-Concept 13.3.2: Measurement error

Measurement errors which might be attributed to the JVS relate to the fact that a number of respondents might be providing the total number of vacancies rather than the number of active vacancies during the reference period. As of 2017, this office changed the data collection tool and added a further breakdown in questions related to vacancies. Respondents are now being asked to identify whether the call for application for the indicated vacancy was still open on the reference date together with the level of education required from the candidate.

Sub-Concept 13.3.3: **Non-response error**

Refer to sub-concept 13.3.1 and 13.3.2.

Sub-Concept 13.3.3.1: Unit non-response

The overall response rate per quarter was as follows:
- Q1 - 79.4%
- Q2 - 79.5%
- Q3 - 84.8%
- Q4 - 81.5%

The response rate above only takes into account feedback received from private sector units. Administrative data is used to obtain information relating to the public sector; thus response is equal to 100%.

Sub-Concept 13.3.3.2: Item non-response

The variable which records the highest missing information is that relating to the number of employed persons working with the responding units.

During the course of 2018, the non-response rate on a quarterly basis was as follows:

- Q1 - 2.3%;

- Q2 - 2.9%;

- Q3 - 3.3%;

- Q4 - 1.6%.

- Average- 2.4%.

Imputations carried out were mainly the result of corrections to the target population.

The imputation rate for the sum of vacancies was distributed as follows:

- Q1 - 1.9%;

- Q2 - 2.5%;

- Q3 - 1.3%;

- Q4 - 1.5%.

- Average - 1.7%

Sub-Concept 13.3.4: Processing error

No specific bias related to a particular variable has been identified.

Sub-Concept 13.3.5: Model assumption error

Not applicable.

CONCEPT 14 – TIMELINESS AND PUNCTUALITY

Sub-Concept 14.1: Timeliness

Data collection starts during the first week following the end of a quarter. The first results are finalised in t+70 days, (i.e. 70 days after the end of quarter).

Sub-Concept 14.2: Punctuality

At a national level, no news release relating to Job Vacancies is issued. JVS data for 2018 was transmitted to Eurostat as follows:

Q1 2015 - 08/06/2018
Q2 2015 - 07/09/2018
Q3 2013 - 03/12/2018
Q4 2013 - 06/03/2019

All transmissions took place within the deadline.

CONCEPT 15 – COHERENCE AND COMPARABILITY

Sub-Concept 15.1: Comparability – Geographical

Definitions are harmonised across all geographical regions. Differences in coverage exist since at a national level, the JVS is carried out among enterprises with 10 or more employees whereas in most of the other Member States it is conducted among those employing 1 or more employees.

Sub-Concept 15.2: Comparability – Over Time

The statistics and coverage of the JVS are comparable over the period 2013 to 2018.

Sub-Concept 15.3: Coherence – Cross Domain

In general, some discrepancies on employment figures emerge between JVS data and the information contained in the Business Register maintained by the NSO. This is mainly due to seasonal fluctuations observed throughout the reference period which are recorded in the JVS while an annual average is often included in the Business Register. Any inconsistencies are duly verified and corrected accordingly as necessary. As for data on job vacancies, coherence across domains is not possible since information on vacated posts is not available from other sources which are comprehensive in terms of coverage and definitions.

Sub-Concept 15.3.1: Coherence – Sub-Annual and Annual statistics

There is coherence between annual and quarterly results since annual figures are the average of the four quarters which are transmitted by this office.

Sub-Concept 15.3.2: Coherence – National Accounts

National Accounts do not produce employment estimates for 10+ employees, therefore coherence for this variable cannot be provided. Moreover, there is no comparable information on vacated posts, hence coherence for this variable is not possible.

Sub-Concept 15.4: Coherence – Internal

Data are checked in order to ensure that there is coherence between one quarter and another in terms of employment. Further checks are made in order to ensure that the JVS data are in-line with employment data contained within the Business Register.

CONCEPT 16 – COST AND BURDEN

Even though the national JVS is a very simple and straight forward survey, it is still contributing towards increasing the response burden on enterprises.

In order to reduce the burden and costs associated with this survey, the NSO carried out data collection amongst the private sector using multimode data collection, whereby a high share of data collection is carried out by electronic mail, whilst ordinary mail is used for those enterprises for which an e-mail address is not available. Still, many follow-up calls are required every quarter in order to ensure a satisfactory response, upon which reliable statistics may be compiled.

CONCEPT 17 – DATA REVISION

Sub-Concept 17.1: Data revision – Policy

JVS data are revised on a regular basis in order to remain in line with updates provided in the target population. These updates are usually provided by JVS respondents or otherwise by the unit in charge of the Business Register. At the NSO, there is currently no internal policy governing revisions that occur for all statistics produced. Nonetheless, a revisions policy is being drafted to safeguard a coordinated revisions system across statistical domains.

This policy will take account of the need and causes for revisions; time and frequency of revisions; data and other statistical products affected by such revisions; and length of periods revised.

Sub-Concept 17.2: Data revision – Practice and Data Revision

Revisions are carried out, at micro-level, on a regular basis. Revisions in the aggregate values for both employment and the number of active vacancies relating to 2013 till 2016 were carried out during 2018. These revisions took into account the number of job vacancies as per reference data for each quarter, thus ensuring that the data was in line with the current JVS regulation. No revisions were made for the reference year 2018.

CONCEPT 18 – STATISTICAL PROCESSING

Sub-Concept 18.1: Source data

Figures for JVS are compiled using both administrative sources and survey data. Information for entities which fall under the public sector is obtained from administrative records whereas private

sector data are collected via a survey. The mode of data collection includes emails, ordinary mail and via telephone call appointments.

Sub-Concept 18.2: Frequency of data collection

Data collection is carried out on a quarterly basis.

Sub-Concept 18.3: Data Collection

All sampled companies receive the survey either by post or through electronic mail. Only companies which have been contacted through electronic mail are re-contacted electronically. Telephone chasing is carried out with all those who have not sent their feedback by the stipulated deadline with emphasis on strata which have a low response rate; these strata tend to vary from one quarter to the other. On the other hand, information related to public entities is attained through administrative sources.

Sub-Concept 18.4: Data Validation

Incoming data are checked for consistency through comparisons with data from previous quarters. In addition, whenever data are not in line with previous feedback, the National Statistics Office directly contacts the respondents via email or telephone.

Sub-Concept 18.5: Data Compilation

For parts of the sample, namely for units which operate in the education sector, information is compiled at local unit level and is then aggregated at company level. This is done in order to ensure that the enterprise equivalent is completely covered for the JVS. Weighting and calibration procedures are carried out at a unit level for all enterprises in the sample. These are based on NACE Section level and Size of Enterprise.

Sub-Concept 18.5.1: Imputation

The number of employed persons working with the responding units is the most variable where missing information can be found. During the course of 2018, the non-response rate on a quarterly basis was as follows:

-   Q1 - 2.3%;
-   Q2 - 2.9%;
-   Q3 - 3.3%;
-   Q4 - 1.6%.
-   Average- 2.4%.

Imputations carried out were mainly the result of corrections to the target population.
The imputation rate for the sum of vacancies was distributed as follows:
-   Q1 - 1.9%;
-   Q2 - 2.5%;
-   Q3 - 1.3%;
-   Q4 - 1.5%.
-   Average: 1.7%

Sub-Concept 18.6: Adjustment

Calibration techniques by NACE and Size Class are used to align sample characteristics with those pertaining to the target population.

Sub-Concept 18.6.1: Seasonal Adjustment

In 2018, JVS data was seasonally adjusted. Data are is aggregated in two different tables according to their economic activity and quarter. The whole series is run through the JDemetra+ program in order to outline the areas were seasonality is present for both occupied posts and vacancies. The accommodation sector is one of the economic activities in which seasonality is constantly present in both vacancies and occupied posts.

CONCEPT 19 - COMMENT

No further comments.