

30 January 2023 | 1100 hrs | 015/2023

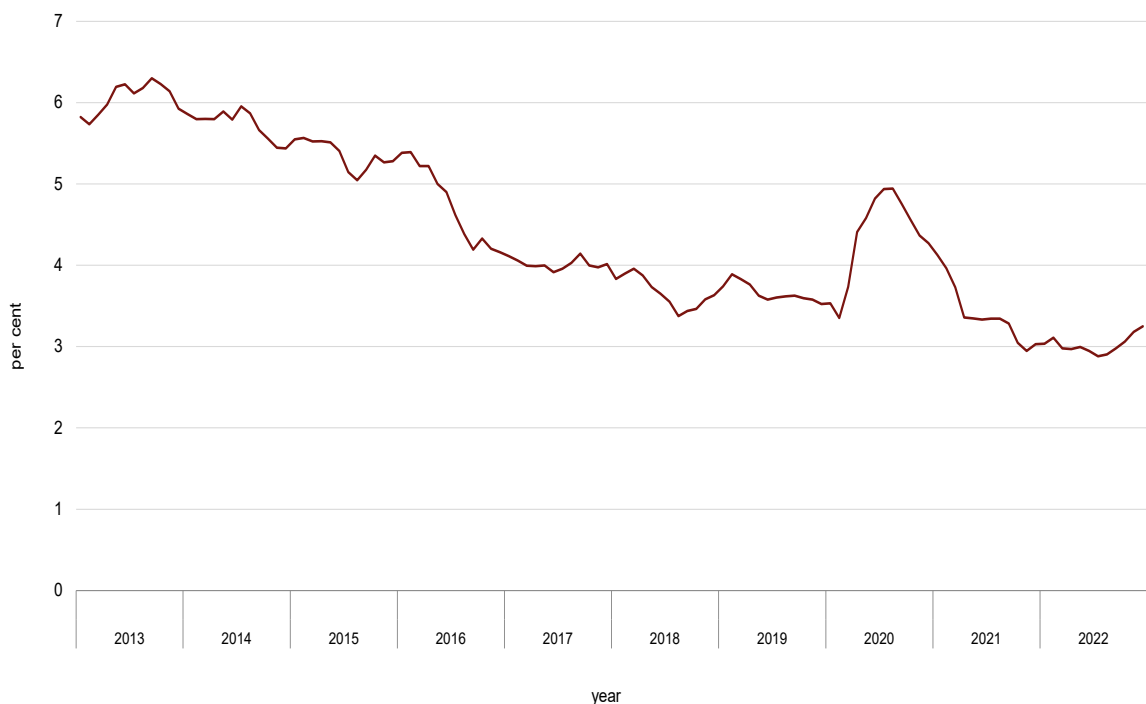
Unemployment Rate: December 2022

The seasonally adjusted monthly unemployment rate for December 2022 stood at 3.2 per cent, at par with the previous month.

Main points

- In December 2022, the monthly unemployment rate was 3.2 per cent (Chart 1, Table 1).
- For the month under review, the unemployment rate for males was 3.3 per cent while the rate for females stood at 3.2 per cent (Table 1).
- The unemployment rate during December 2022 for persons aged 15 to 24 years (youth unemployment rate) was 9.1 per cent while the rate for those between 25 and 74 years stood at 2.6 per cent (Table 1).

Chart 1. Seasonally adjusted monthly unemployment rate



Note: Data for reference years 2013-2021 is on annual basis; data for reference year 2022 is for January to December.

Components leading to the seasonally adjusted monthly unemployment rate

The unemployment rate for December 2022 stood at 3.2 per cent, at par with the previous month but 0.2 percentage points higher than December 2021 (Table 1).

During December 2022, the number of unemployed persons was 9,663, with the males and 25 to 74 age group being the major contributors to the overall level of unemployment. The seasonally adjusted number of unemployed youths amounted to 2,686, whereas those aged between 25 and 74 years stood at 6,977 (Table 2).

For December 2022, the unemployment rate for males stood at 3.3 per cent, at par with November 2022. The rate for females stood at 3.2 per cent, increasing by 0.2 percentage points when compared with the previous month (Table 1).

The unemployment rate for persons aged 15 to 24 years (youth unemployment rate) was 9.1 per cent, while the rate for those aged between 25 and 74 years stood at 2.6 per cent (Table 1, Chart 2).

Table 1. Seasonally adjusted unemployment rate by age group, sex and month

| Month | Age group | | Sex | | Total |
|-----------|-------------|-------|-------|---------|------------|
| | 15-24 | 25-74 | Males | Females | |
| | % | | | | |
| | 2021 | | | | |
| December | 10.3 | 2.3 | 3.1 | 2.9 | 3.0 |
| | 2022 | | | | |
| January | 8.2 | 2.5 | 3.4 | 2.5 | 3.0 |
| February | 7.9 | 2.6 | 3.6 | 2.4 | 3.1 |
| March | 8.3 | 2.4 | 3.4 | 2.4 | 3.0 |
| April | 9.0 | 2.3 | 3.1 | 2.8 | 3.0 |
| May | 9.2 | 2.3 | 3.1 | 2.8 | 3.0 |
| June | 8.5 | 2.3 | 3.1 | 2.7 | 2.9 |
| July | 8.1 | 2.3 | 3.1 | 2.5 | 2.9 |
| August | 8.2 | 2.4 | 3.1 | 2.6 | 2.9 |
| September | 8.1 | 2.4 | 3.2 | 2.6 | 3.0 |
| October | 8.1 | 2.5 | 3.2 | 2.8 | 3.1 |
| November | 8.7 | 2.6 | 3.3 | 3.0 | 3.2 |
| December | 9.1 | 2.6 | 3.3 | 3.2 | 3.2 |

Chart 2. Seasonally adjusted monthly unemployment rate by age group

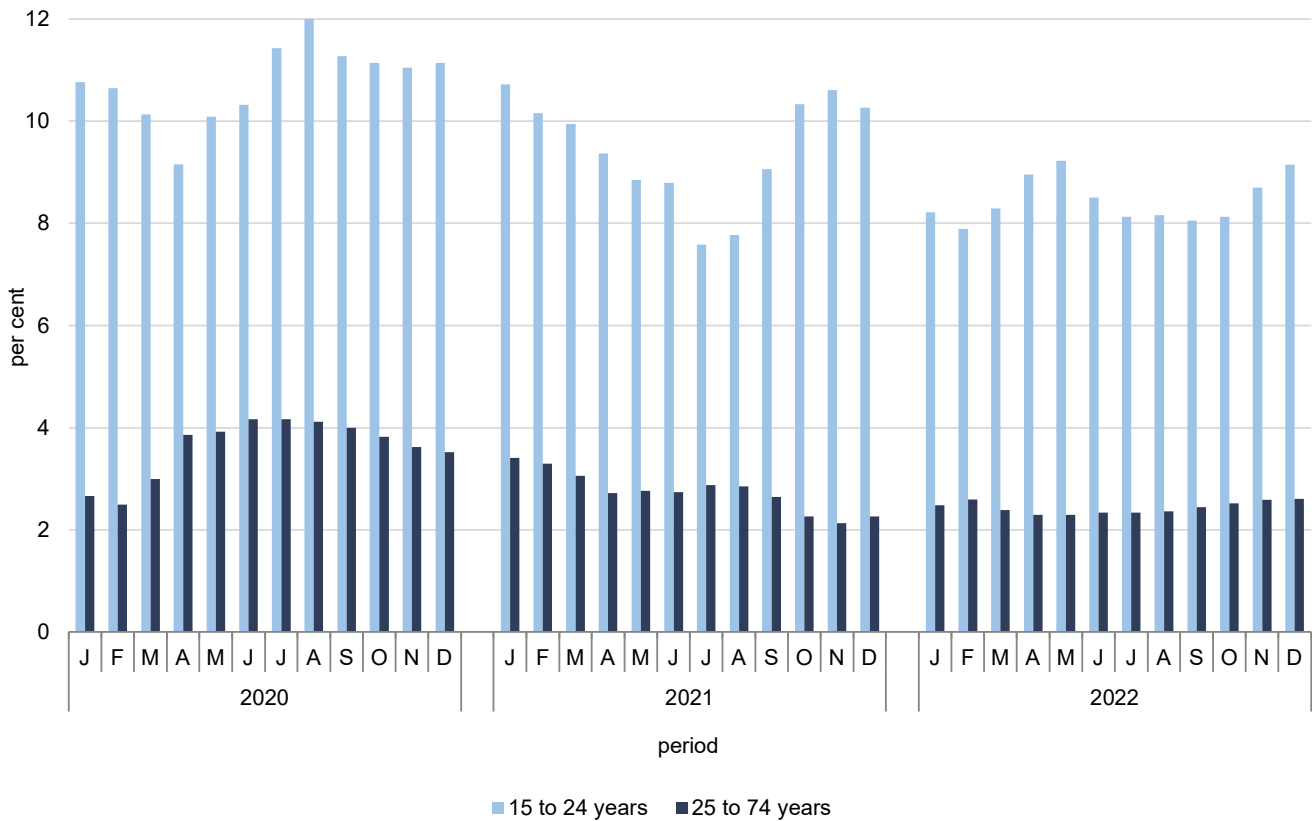


Table 2. Seasonally adjusted unemployment levels by age group, sex and month

| Month | Age group | | Sex | | Total |
|-------------|-----------|-------|-------|---------|--------------|
| | 15-24 | 25-74 | Males | Females | |
| 2021 | | | | | |
| December | 2,799 | 5,840 | 5,170 | 3,469 | 8,639 |
| 2022 | | | | | |
| January | 2,240 | 6,393 | 5,650 | 2,983 | 8,633 |
| February | 2,202 | 6,684 | 5,977 | 2,909 | 8,886 |
| March | 2,375 | 6,154 | 5,639 | 2,890 | 8,529 |
| April | 2,614 | 5,926 | 5,235 | 3,304 | 8,539 |
| May | 2,693 | 5,950 | 5,247 | 3,397 | 8,644 |
| June | 2,419 | 6,104 | 5,287 | 3,236 | 8,522 |
| July | 2,220 | 6,138 | 5,281 | 3,077 | 8,358 |
| August | 2,228 | 6,245 | 5,314 | 3,159 | 8,473 |
| September | 2,238 | 6,497 | 5,488 | 3,247 | 8,736 |
| October | 2,308 | 6,707 | 5,449 | 3,566 | 9,015 |
| November | 2,500 | 6,904 | 5,560 | 3,844 | 9,404 |
| December | 2,686 | 6,977 | 5,553 | 4,110 | 9,663 |

Methodological Notes

1. The purpose of this release is to provide a detailed series of monthly unemployment estimates using harmonised definitions applied in the Labour Force Survey (LFS). The release contains both monthly unemployment rates and monthly unemployment levels.
2. The monthly unemployment rates are based on the definition recommended by the International Labour Organisation (ILO). The measurement is based on a harmonised source, the LFS, which is designed to satisfy the concepts and definitions as outlined by Eurostat, the EU's Statistical Agency.
3. At a national level the NSO publishes labour market data generated from two different sources, namely the Labour Force Survey and administrative data from Jobsplus. Both sets of data are considered as official statistics; however one has to bear in mind that there may be differences between the sources owing to different definitions. While the count of employed and unemployed is based on persons registering for work, the LFS definition is based on the ILO criteria as explained in the methodological notes.

The LFS is a household survey which provides an insight into the labour market dynamics among private households. The survey is designed to satisfy the concepts and definitions as outlined by Eurostat and allows the comparability of results with other EU Member States and countries following ILO definitions of employment and unemployment.

When comparing unemployment levels between the two sources of data, one notes a variable gap between the two levels. This is mainly the result of different definitions. Unemployment in LFS includes all persons who do not have a job, are looking for a job and are ready to start working within two weeks of the reference period. This makes the LFS definition wider in scope when compared to that of Jobsplus.

Over the past years, there has been an increase in the number of unemployed who do not register with Jobsplus but who result to be unemployed when using the LFS criteria. In this regard, LFS unemployment levels encompass individuals who may not necessarily resort to Jobsplus to find a job.

Due to these reasons, one can observe that Jobsplus unemployment levels are highly determined by eligibility criteria and national policies addressing work. LFS levels are on the other hand, determined by the dynamics of the labour market. Consequently, there may be instances when trends may not be completely aligned.

The monthly unemployment rates are computed on the basis of a benchmarking model which combines monthly Jobsplus administrative data on employment and unemployment with quarterly LFS data. This computation produces the non-seasonally adjusted (NSA) estimates, which are then seasonally adjusted (SA). The results in this release are all seasonally adjusted; however, non-seasonally adjusted data are included in the Excel version of this release. The monthly figures produced differ from the quarterly LFS published data due to differences in the method of calculation.

4. Definitions:
 - **Employed persons:** all persons aged 15 to 74 years who, during the reference week, were in one of the following categories:
 - **worked for at least 1 hour for pay or profit**, including contributing family workers and paid casual work.
 - **persons with a job or business who were temporarily not at work** during the reference week but had an attachment to their job, including:
 - (a) persons not at work due to holidays, working time arrangements, sick leave, maternity or paternity leave;
 - (b) persons in job-related training or formal education;
 - (c) persons on parental leave, either receiving and/or being entitled to job-related income or benefits, or whose parental leave is expected to be 3 months or less;
 - (d) seasonal workers during the off-season, where they continue to regularly perform tasks and duties for the job or business, excluding fulfilment of legal or administrative obligations;
 - (e) persons temporarily not at work for other reasons where the expected duration of the absence is 3 months or less.
 - **Labour force:** the sum of persons aged 15 to 74 years who are either employed or unemployed.
 - **Unemployed persons:** the sum of persons aged 15 to 74 years who, during the LFS reference week, satisfied the following criteria:
 - **without work**
 - **actively seeking work during the previous 4 weeks:** i.e. had either carried out activities in the four-week period ending with the reference week to seek paid employment or self-employment or found a job to start within a period of at most 3 months from the end of the reference week. Examples of active job search include contacting Jobsplus, studying job advertisements or placing or updating CVs online.
 - **currently available for work:** i.e. available for paid employment or self-employment before the end of the 2 weeks following the reference week.
 - **Unemployment rate:** Unemployed persons (15 to 74 years) as a percentage of the labour force (15 to 74 years).

5. Methodology:

- **Calculation of monthly estimates to produce non-seasonally adjusted estimates:** The LFS provides benchmark estimates of employment and unemployment for each quarter since 2005. These quarterly benchmark estimates are used to compile monthly data using the Proportional Denton method. For months where the quarterly LFS data is not yet available, data is forecasted in order to compile the monthly estimates. This methodology provides the non-seasonally adjusted estimates.
- **Seasonal adjustment:** To correct for typical seasonal patterns, the data series included have been concurrently seasonally adjusted. This seasonal adjustment is completed by applying the ARIMA time series models, integrated in the JDemetra+ application. This seasonal adjustment is conducted using the indirect approach, where each individual series is adjusted. The individual series taken into consideration for both employment and unemployment are:
 - Males aged 15 to 24 years
 - Males aged 25 to 74 years
 - Females aged 15 to 24 years
 - Females aged 25 to 74 years

6. For further information on the methodology to produce the monthly estimates kindly access the link:

https://nso.gov.mt/en/nso/Sources_and_Methods/Unit_C2/Labour_Market_Statistics/Documents/Monthly%20unemployment%20rate%20-%20Methodology.pdf

7. The full series starting from January 2010 for both NSA and SA is published in the Excel version of this release.

8. Revisions:

Due to the method adopted, the data in this news release is subject to revisions, which are caused by the following:

- **Inclusion of the most recent LFS data in the NSA calculation process**

The monthly estimates are released at approximately 30 days from the reference month. Later, when the quarterly LFS estimates are produced (at approximately 90 days from the end of the quarter), the non-seasonally adjusted estimates of the three months are recalculated using a mathematical model based on the latest available data. The availability of new LFS results provides basis upon which projected monthly estimates can be updated with more robust results. The non-seasonally adjusted monthly estimates are then revised when data is published for the first month following the LFS reference quarter.
- **Updates to the seasonally adjusted series whenever new monthly data are added**

The monthly seasonally adjusted series are calculated every month using time series models with updates in ARIMA model parameters. Every month, the full time series data is seasonally adjusted using the new data point in the series. This explains why variations are noted in the seasonally adjusted data every month.
- **Revisions in LFS data**

Periodically, the monthly estimates will be subject to revision due to revisions in LFS data. Changes in LFS estimates are carried out intermittently to align the estimates with updated population figures.

9. Compared with the rates published in News Release No. 003/2023 on 10th January 2023, the seasonally adjusted unemployment rate for November 2022 remained unchanged at 3.2 per cent.

10. Figures may not add up due to rounding.

11. As from January 2021, Regulation (EU) 2019/1700 establishing a common framework for European statistics relating to persons and households, based on data at individual level collected from samples and Commission Delegated Regulation (EU) 2020/257 of 16th December 2019 supplementing Regulation (EU) 2019/1700 of the European Parliament and of the Council by specifying the number and the title of the variables for the labour force domain, came into force. This regulation shall be referred to as the IESS regulation (Integrated European Social Statistics).

This legislation has mainly led to changes in the LFS questionnaire and mode of data collection. An analysis of the impact of this change on LFS estimates was conducted in order to assess the divergence of LFS results from pre-IESS to post-IESS levels. The analysis also covered the production of monthly unemployment rates. Technical notes on these divergences are found in:

https://nso.gov.mt/en/nso/Sources_and_Methods/Unit_C2/Labour_Market_Statistics/Pages/Labour-Force-Survey.aspx

12. References to this News Release are to be cited appropriately.

13. Statistics in this News Release should be interpreted in the context of the COVID-19 situation.

14. A detailed news release calendar is available on:

https://nso.gov.mt/en/News_Releases/Release_Calendar/Pages/News-Release-Calendar.aspx