

Average full time adjusted salary per employee (nama_10_fte)

Reference Metadata in Euro SDMX

Metadata Structure (ESMS)

Compiling agency: Eurostat, the
statistical office of the European Union

Eurostat metadata

Reference metadata

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For any question on data and metadata, please contact: [Eurostat user support](#)

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1. Contact		Top
1.1. Contact organisation	Eurostat, the statistical office of the European Union	
1.2. Contact organisation unit	Unit C2 - National Accounts - production	

1.5. Contact mail address	Eurostat, the statistical office of the European Union 5 Rue Alphonse Weicker L-2921 Luxembourg
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2. Metadata update Top	
2.1. Metadata last certified	19/12/2022
2.2. Metadata last posted	19/12/2022
2.3. Metadata last update	19/12/2022

3. Statistical presentation Top	
3.1. Data description	
<p>The 'average full-time adjusted salaries per employee' is an indicator calculated by Eurostat. It is requested by the Blue Card Directive adopted on 20 October 2021 as a threshold to be used nationally to grant working permits to high-skilled workers. Practically, the indicator stands for a salary that is sufficient to live decently in a Member State. Such a salary is estimated from the average annual salary for a full-time job.</p> <p>The indicator is based on two data sources:</p> <ul style="list-style-type: none"> - The regular set of National Accounts data transmitted by the Member States under the European System of Accounts 2010 Transmission Programme (ESA 2010 TP); - The EU-Labour Force Survey, conducted by the National Statistical Institutes in accordance with Regulation (EU) 2019/1700. <p>While users could use similar indicators published nationally, Eurostat provides a ready-to-use indicator with a common methodology and explanatory metadata.</p> <p>The use of a harmonised method by Eurostat is aimed to increase transparency and cross-country comparability. However, users should be aware that there are different indicators published by the countries or other international organisations that may use partly different sources. While these can be more suited for specific analysis, users are invited to consult the metadata published with the respective indicators to be aware of specific sources, methods and/or assumptions used. See for example links below:</p> <ul style="list-style-type: none"> - Belgium: be.STAT (fgov.be). - The Netherlands: StatLine - Compensation of employees, employment, economic activity, National Accounts (cbs.nl). 	
3.2. Classification system	
<p>Annual National Accounts data used to derive the 'Average full-time adjusted salary per employee' indicator are compiled in accordance with the European System of Accounts - ESA 2010 as defined in Annex B of the Council Regulation (EU) No 549/2013 of the European Parliament and of the Council published in the Official Journal on 26 June 2013. The associated transmission programme defines compulsory data transmissions from September 2014 onwards. ESA 2010 is aligned with the international statistical standard — the SNA 2008 — published by the United Nations.</p> <p>For a complete review of classifications used, please refer to:</p> <ul style="list-style-type: none"> - ESA 2010 Chapter 23 'Classifications' 	

- 'The European System of Accounts 2010 Transmission Programme' Annex B of the Council Regulation (EU) N°549/2013 of the European Parliament and of the Council of 21 May 2013 (cf. also Article 3 of this regulation)

- Eurostat's [RAMON classification database](#)

- [United Nations classification registry](#).

Labour Force Survey data used to derive the 'Average full-time adjusted salary per employee' indicator are produced in accordance with the relevant international classification systems. For more details on classifications (including the comparability between the revised classifications), levels of aggregation and transition rules, please consult [EU labour force survey - documentation - Statistics Explained \(europa.eu\)](#).

3.3. Coverage - sector

The 'Average full-time adjusted salary per employee' indicator presented in this dataset is compiled at the level of the total economy without any breakdown.

3.4. Statistical concepts and definitions

The method to calculate the 'Average full-time adjusted salary per employee' consists of 3 steps:

1. Calculating the gross average annual salary per employee from data provided in the ESA transmission programme: D11 (wages and salaries in current prices from table nama_10_gdp) divided by SAL (number of Employees domestic concept from table nama_10_pe)

$$\text{Gross average annual salary per employee} = \text{D11} / \text{SAL}$$

2. Calculating the annual Full-Time Equivalent ratio (FTE_R) from Labour Force Survey: usual weekly hours for full-time employees divided by usual weekly hours for all employees (from tables lfsa_ewhun2 and lfsa_ewhuna).

3. Average full-time adjusted salary per employee = $\text{D11} / \text{SAL} * \text{FTE_R}$

Please note that the Full-Time Equivalent ratio (step 2) cannot be estimated from National Accounts (Full-Time Equivalent Employment series are not compulsory in the ESA2010 transmission programme) but can be estimated from the Labour Force Survey (LFS).

The applied methodology has, nevertheless, the following limitations:

- As weekly hours are only collected for the main job, the denominator of the ratio is slightly underestimated (hours of second and third jobs are not taken into account). Therefore, the ratio is slightly overestimated. However, as only 2.4% of employees have a second job, the impact should be very low.
- The scope of LFS (national concept) is slightly different from the National Accounts one (domestic concept). Consequently, some units fall out of the scope of LFS, especially workers commuting daily abroad, armed forces and people living in communities, and the impacts may be significant in small countries such as Luxembourg.

However, it also has clear advantages such as:

- it ensures the comparability of data among 26 Member States as the methodology is the same;
- it is less biased than alternative methods as it uses only ratios from LFS and not levels;
- indicator values were checked over a long period: series from 1995 in national currency show trends but neither outliers nor volatility.

3.5. Statistical unit

The units used in National Accounts data published by Eurostat are, in principle, the local kind-of -activity unit (KAU) or the institutional unit, as defined in ESA 2010. However, deviations might occur where the units used in the received country data are

not fully compliant with the ESA 2010 guidelines. For information on the statistical unit, please refer to [nama10](#).

The units used in EU-LFS are persons.

3.6. Statistical population

The National Accounts population of a country consists of all resident statistical units (institutional units or local KAUs, see section 3.5).

A unit is a resident unit of a country when it has a centre of predominant economic interest on the economic territory of that country, that is when it engages for an extended period (one year or more) in economic activities on this territory. For more information on statistical population, see [nama10](#).

The EU-LFS results cover the total population usually residing in the Member States, except for persons living in collective or institutional households.

3.7. Reference area

Eurostat publishes the 'Average full-time adjusted salary per employee' for all [EU Member States](#) except for the Netherlands.

Statistics Netherlands applies a somewhat different methodology than Eurostat, using exhaustive register information on individual persons to calculate the average full-time adjusted salaries.

These data are published on the website [StatLine - Compensation of employees, employment; economic activity, National Accounts \(cbs.nl\)](#)

3.8. Coverage - Time

Time coverage (i.e., length of the historical series) can differ for individual national series. Generally, coverage starts from 1995, with some exceptions mostly in the case of the new Member States due to EU-LFS shorter coverage.

3.9. Base period

Not applicable

4. Unit of measure

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This indicator encompasses the current prices units **Euro (EUR)** and **National currency (NAC)**.

5. Reference Period

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The reference period is the calendar year.

For EU-LFS data, yearly data are defined building up time periods based on the EU-LFS reference week.

6. Institutional Mandate

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6.1. Institutional Mandate - legal acts and other agreements

Following a policy request from DG HOME, in the framework of the Blue Card Directive, Eurostat is deemed to provide a new indicator used as a salary threshold called 'Average full-time adjusted salary per employee'.

The new Blue Card Directive on the conditions of entry and residence of third-country nationals for the purpose of highly qualified employment was published on 28 October 2021.

The Directive aims to attract highly skilled workers to the EU under more flexible admission conditions, with enhanced rights and the possibility to move more easily to another EU Member State for EU Blue Card holders. The revised Directive provides real added value compared with the current Directive in terms of flexibility of applied salary thresholds for applicants.

Article 5 lists the criteria for admission and especially the following: *'the amount of gross annual salary resulting from the monthly or annual salary specified in the work contract or binding job offer shall not be lower than the salary threshold set and published for that purpose by the Member State concerned.'*

The Directive gives the Member States some flexibility to fix national salary thresholds, above which the annual salary specified in the work contract or binding job offer shall be. Article 25 on statistics specifies that:

'For the purpose of the implementation of Article 5(3), (4) and (5) of this Directive, reference shall be made to data provided by Member States to Eurostat in accordance with Regulation (EU) No 549/2013 of the European Parliament and of the Council and, where appropriate, to national data.'

6.2. Institutional Mandate - data sharing

Not applicable

7. Confidentiality

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7.1. Confidentiality - policy

[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.

The [European Statistics Code of Practice](#) provides further conditions that have to be respected by statistical offices in regard to statistical confidentiality (Principle 5).

Eurostat applies the confidentiality policy as described in Regulation (EC) No 223/2009 on European statistics and in Principle 5 of the European Statistics Code of Practice. In case the data of a country is missing but could be derived from the EU total minus the other reporting countries, Eurostat applies secondary confidentiality and ensures the data remain confidential. Confidential data are not disclosed by Eurostat. Access to confidential data for scientific purposes may be granted (after informing and requesting authorisation from respective country) on the basis of Commission Regulation 557/2013 and Regulation 223/2009 of the European Parliament and the Council on European statistics.

7.2. Confidentiality - data treatment

If the Member States transmit data with a confidentiality flag or an embargo date, these data are not disseminated until the confidentiality flag is removed in subsequent data transmission or the embargo expired. The same rule applies to the indicator 'Average full time adjusted salary per employee' as it is compiled with transmitted data. Confidential data appear as ":" in Eurobase, possibly combined with a C flag.

8. Release policy

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8.1. Release calendar

This indicator is released once a year, in Autumn, after the T+9 National Accounts annual data transmission.

8.2. Release calendar access

Dates of data release are disseminated on [Eurostat's website](#). Besides, the release calendar for National Accounts is published on the [dedicated section](#).

8.3. Release policy - user access

In line with the Community legal framework and the [European Statistics Code of Practice](#) Eurostat disseminates European statistics on Eurostat's website (see item 10 - 'Accessibility and clarity') respecting professional independence and in an objective, professional and transparent manner in which all users are treated equitably. The detailed arrangements are governed by the [Eurostat protocol on impartial access to Eurostat data for users](#).

9. Frequency of dissemination

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This indicator will be updated on an annual basis after the T+9 National Accounts annual data transmission defined in the European System of Accounts (ESA 2010) [transmission programme](#).

10. Accessibility and clarity

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10.1. Dissemination format - News release

No specific news release is foreseen at this stage.

10.2. Dissemination format - Publications

No specific publication is foreseen at this stage.

10.3. Dissemination format - online database

This indicator is manually derived and disseminated in Eurostat's online database (Eurobase) when underlying input data are published after a successful validation process.

10.4. Dissemination format - microdata access

Not applicable.

10.5. Dissemination format - other

The information may be posted using social media, especially the day of the dissemination.

Eurostat makes use of Facebook and Twitter.

Eurostat's Facebook messages can be accessed here: [EurostatStatistics](#)

Eurostat's Twitter messages can be accessed here: [@EU_Eurostat](#)

10.6. Documentation on methodology

Input data used to derive this indicator are based on:

- The [ESA 2010 Transmission Programme](#) (ESA 2010 TP). [ESA 2010](#) constitutes the general methodological framework for this compilation. The country data published in Eurostat's database are prepared by the respective countries using the methodologies as specified under the metadata description of those countries. The ESA 2010 guidelines are applied by all countries.

- The Labour Force Survey data. The methodology is available at [EU labour force survey - Statistics Explained \(europa.eu\)](#)

10.7. Quality management - documentation

See section 11

11. Quality management	Top
11.1. Quality assurance	
Quality is assured by the application of a common methodology (for both the indicator and input data) and by thorough validation of the data delivered by countries.	
11.2. Quality management - assessment	
<p>ESA 2010 data transmissions are subject to regular quality assessment reviews. Article 4 of Regulation (EU) No 549/2013 (ESA 2010 Regulation) specifies that the data covered by that Regulation be subject to the quality criteria, namely relevance, accuracy, timeliness and punctuality, accessibility and clarity, comparability and coherence, as set out in Article 12(1) of Regulation (EC) No 223/2009 of the European Parliament and of the Council. Member States are to provide the Commission with a report on the quality of the transmitted data on national and regional accounts. The modalities, structure, periodicity and assessment indicators of the quality reports on data transmitted have been specified in a Commission Implementing Regulation 2016/2304 of 19 December 2016. The implementation of the quality reporting and assessment exercise started in 2017 and is carried out annually. As part of the annual exercise, Eurostat assesses the results, prepares and publishes an overall assessment based on the national quality reports and other available information. The Commission also, on a 5-year basis, reports to the European Parliament and the Council on the application of the ESA 2010 Regulation, including the quality of data on national and regional accounts. The first of such reports was published in 2018: REPORT FROM THE COMMISSION TO THE EUROPEAN PARLIAMENT AND THE COUNCIL on the application of Regulation (EU) No 549/2013.</p> <p>EU-LFS statistics have overall high quality. National LFS are considered as reliable sources applying high standards with regard to the methodology. However, the EU-LFS, like any survey, is based upon a sample of the population. The results are therefore subject to the usual types of errors associated with random sampling. Based on the sample size and design in the various Member States, Eurostat implements basic guidelines intended to avoid publication of figures that are unreliable and to give warning for low reliability.</p> <p>More information on the quality assessment on EU-LFS data is available at:</p> <ul style="list-style-type: none"> - employ_esms - Employment and unemployment (Labour force survey) - Quality reporting - Employment and unemployment (LFS) - Eurostat (europa.eu) 	

12. Relevance	Top
12.1. Relevance - User Needs	
The indicator 'Average full-time adjusted salary per employee' is needed for the implementation of the Blue Card Directive (see Section 6)	
12.2. Relevance - User Satisfaction	
<p>Before the adoption of the Blue Card Directive, several exchanges with DG HOME resulted in an agreement on a methodology.</p> <p>Views of National Statistical Institutes were also collected and most Member States agreed on the dissemination of the indicator.</p>	
12.3. Completeness	
<p>The indicator is available for 26 EU Member States (except the Netherlands) from 1995 onwards except for:</p> <ul style="list-style-type: none"> - Slovenia (from 1996) - Czechia, Estonia and Romania (from 1997) - Latvia, Lithuania and Slovakia (from 1998) 	

- Malta (from 2000)
- Bulgaria and Poland (from 2001)
- Croatia (from 2002)

13. Accuracy

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13.1. Accuracy - overall

Eurostat assesses the accuracy of national data by systematically applying validation checks to all national accounts transmissions of countries. The accuracy of national accounts estimates is analysed in terms of revisions. For more information, see Section 13 of [nama10](#).

The overall accuracy of the EU-LFS data is considered as high. The EU-LFS is a sample survey with a relatively large sample size. All countries apply a probability sampling. As the EU-LFS data are based on a population sample and are mostly collected by interview, they are subject to the usual types of errors associated with sampling techniques and interviewing. Sampling and non-sampling errors, are calculated for each country and documented in the [Quality Report of the European Union Labour Force Survey](#).

For more information, see also section 13 of [employ_esms](#)

13.2. Sampling error

This is only applicable for EU-LFS data. See section 13.1

13.3. Non-sampling error

This is only applicable for EU-LFS data. See section 13.1

14. Timeliness and punctuality

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14.1. Timeliness

National Accounts data: Member States are required to transmit their data to Eurostat in compliance with the European System of Accounts ESA 2010 transmission programme. Country data are usually transmitted at the deadlines as defined in the ESA 2010 transmission programme. Some countries transmit their data earlier, others later but not more than a few days. For the computation of the indicator 'Average full time adjusted salary per employee', a transmission of annual data is scheduled at T+9 months.

EU-LFS data: Article 11 of Regulation (EU) 2019/1700 establishes the timeliness of data transmissions from the National Statistical Institutes as well as the publication deadline of the aggregated data on the Commission (Eurostat) website.

14.2. Punctuality

National Accounts data: National accounts data transmissions in the framework of the ESA 2010 transmission programme should be punctually delivered to Eurostat at the timeliness defined in the transmission programme (or before). Transmission of annual data is scheduled at T+9 months and allows the annual update of the indicator 'Average full time adjusted salary per employee' in Autumn.

EU-LFS data: annual data are published in T+4 months (after the end of the reference period) and therefore should not delay the publication of the indicator 'Average full time adjusted salary per employee'.

15. Coherence and comparability

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15.1. Comparability - geographical

National Accounts data: The comparability is insured by the application of common definitions (European System of Accounts [ESA 2010](#)).

EU-LFS data: Comparability of the EU-LFS across countries is considered as high and is achieved through various regulations ensuring harmonisation of concepts, definitions and methodologies. [Regulation \(EU\) 2019/1700](#) and its Commission Implementing Regulation (EU) 2019/2240 further enhance the comparability between countries, with namely the input harmonisation of employment and unemployment. For more information, see section 15.1 of [employ_esms](#)

15.2. Comparability - over time

National Accounts data: by using a common framework, the European System of Accounts ESA 2012, data can be comparable over time. In addition, in the case of fundamental changes to methods or classifications, revisions of long-time series are performed, usually going far back into the past.

EU-LFS data: From 2021 onwards, Regulation (EU) 2019/1700 provides the new framework for the EU-LFS. Its Commission Implementing Regulation (EU) 2019/2240 for the labour market domain updates some crucial definitions, including the Eurostat operational definitions of the three ILO labour statuses (employed, unemployed and outside the labour force). The changes in the operational definition and derivation of the labour status can cause breaks in the time series of the LFS indicators. The measurement of the actual working hours has also been further harmonised across countries, which may cause an additional break between 2020 and 2021 in the time series for some countries. See also: [EU labour force survey - correction for breaks in time series - Statistics Explained \(europa.eu\)](#).

For more details on the comparability over time of the LFS data since 1983, please consult: [EU-LFS \(Statistics Explained\) - Data and Publication >>> Comparability over time](#)

15.3. Coherence - cross domain

There is no full consistency between national accounts data and LFS data. The main reasons are differences in concepts/definitions and in coverage. See section 3.6.

15.4. Coherence - internal

See section 15.3 (Coherence - cross domain).

16. Cost and Burden

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Since the 'Average full time adjusted salary per employee' is derived by Eurostat based on existing data transmissions, no additional cost or burden for countries.

17. Data revision

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17.1. Data revision - policy

Data are revised once a year in Autumn and include:

- Revisions in National Accounts data: National accounts data are subject to continuous revisions as new input data become available. They are called routine revisions and entail regular revisions of country data and of the European aggregates, which are derived from the former.

More rarely, exceptional revisions (called benchmark revisions) will result from major changes in data sources, classifications or methodology.

- Revisions in LFS data: EU-LFS results are usually considered final with first dissemination. However, occasional revisions can occur if irregularities are discovered during in depth analysis or use or in case of change or improvements in the methodology. There are few exceptions to this: if new population estimates for past

periods become available after a new census round, or in the context of back data revisions of regional coding.

17.2. Data revision - practice

Revisions practices for national accounts are monitored in the annual quality reports. For information on EU-LFS data revisions, please consult [EU-LFS \(Statistics Explained\) - Data and publication](#)

18. Statistical processing

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18.1. Source data

This indicator is based on National Accounts data and on LFS data.

18.2. Frequency of data collection

Annual.

18.3. Data collection

National Accounts data: The data collection is very country-specific and also varies according to the nature of the data source, e.g. administrative data, tax and car registers, surveys and accounting statements. Guidance can be found in the [Handbook of Recommended Practices for Questionnaire Development and Testing Methods](#) in the ESS.

Data in ESA 2010 are transmitted via [SDMX](#) which introduced standardised codes.

EU-LFS data: collection is carried out through mainly four modes: personal visits, telephone interviews, web interviews and self-administered questionnaires. About half of the participating countries conduct the first interview always or mainly via CAPI while in subsequent waves the interviews are performed by CATI, if a telephone contact is available. For more information please consult the corresponding [LFS quality report](#).

18.4. Data validation

National Accounts data: The data undergo a comprehensive validation work around two components performing validation operations: one for [structural validation](#) (called STRUVAL) and one for [content validation](#) (called CONVAL) aiming to ensure that no incomplete or otherwise incorrect data enters production databases for further processing. The validation services are designed to produce full, detailed and descriptive [reports and feedback](#) to production stakeholders on the possible presence of validation failures to support effective and efficient corrective responses. See also [nama10](#).

EU-LFS data: LFS micro-data also undergo validation operations for [structural validation](#)(STRUVAL) and [content validation](#)(CONVAL).

18.5. Data compilation

Eurostat compiles this indicator based on national accounts data and LFS data with harmonised formulae.

Eurostat is responsible for the compilation of this indicator, as well as for its methodology.

18.6. Adjustment

No

19. Comment

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No additional comment.

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