

Description of Income Data – www.inequalityin.eu

1) What are the origins of the data presented?

The data we use for this website have their origin in the EU Statistics on Income and Living Conditions (EU-SILC). EU-SILC gathers information of private households regarding living conditions on a yearly basis, both within the EU and in other European countries. Included are categories such as employment situation and housing conditions as well as education and health. EU-SILC places major emphasis on collecting income data of employees. Detailed data concerning income composition are based on personal income statistics, i.e. individual income of specific household members (EUROSTAT, 2016). We use personal income data on this website, in order to illustrate differing income situations throughout EU member states.

2) How are the data collected?

All EU-SILC data are gathered via survey (phone- or computer-based). Households are randomly chosen, all household members are surveyed and persons above the age of 16 are interviewed. In Austria, for example, approximately 6000 households are included every year (Statistik Austria, 2019).

3) Which data are shown on the website?

Our EU-SILC data set counts every member of a household who provides information about occupation and income as an observation. This could be, for example, a hotel cleaner (occupation) who earns 1 300 EUR per Month (income). Hotel cleaners are classified as an occupational sub category within EU-SILC. Different occupational sub categories are assigned to various occupational main categories (see Table 1). The occupational group “Cleaning Personnel” consists of 68 professions, including for example hotel cleaners, window cleaners, pool cleaners and laundry employees. The Excel File “Income: Data Description Stereotype”, available on the website, gives an overview of all occupational groups, for further information please refer to ILO (2016). In total, income data of 12 occupational groups across 25 countries are displayed.¹ Data for Slovenia, Malta and Ireland are currently not available via EU-SILC.

¹ Pensioners are no occupational group but are included for comparisons.

Table 1: Occupational groups on www.inequalityin.eu and occupational subcategories, source: ILO (2016)

Occupational Group	Examples of Subcategories	Number of Subcat.
Medical Doctors	MD, Nurse	247
Construction Experts and Mechanical Professions	Builder, Painter, Fitter	512
Office Staff (General)	Secretary, Clerk	41
Banking, Finance and Insurance	Broker, Assistant	263
Transport and Operation of Mobile Equipment	Bus Driver, Crane Operator	192
Medical Professions	Paramedic, Consultant, Masseur/Masseuse	181
Education and Care	Professor, Kindergarten Teacher	122
Management and Politics	Politician, CEO	513
Pensioners	x	x
Cleaning Personnel	Hotel Cleaner, Laundry Employee	68
Technicians	Engineer, Technician	351
Personalised Services	Guide, Waiting Personnel	169
Sales and Trading	Cashier, Florist	122

Incomes on the website are gross cash or near-cash employee income paid by employers to employees (Code: PY010G, EUROSTAT 2019). Only incomes of people working for 12 consecutive months are included. Incomes are only displayed if, there are more than 25 observations for an occupational group. Data are from the most recent EU-SILC surveys available for each country.² For all main occupational groups, three different incomes are featured on the website: median income, income percentile-25 (P25) and percentile-75 (P75):

- Median income denotes the value of income at which the same number of incomes find themselves above and below a certain threshold – it separates the data set in half. For example, if 100 observations of income within a certain occupational main group are ordered according to income level, median income is represented by income number 50.
 - Illustration: three observations for the occupation “Cleaning Personnel” exist: a hotel cleaner earns 1000 EUR, a window cleaner 1500 EUR and a laundry employee 2000 EUR. Sorted by income level: 1000, 1500, 2000 – 1500 represents the median income.
- Of 100 incomes sorted by income level, percentile-25 (percentile-75) represents the value where 75 (25) persons earn more and 25 (75) earn less.

The website displays monthly- and hourly wages.³ In order to illustrate gender specific wage disparities, a juxtaposition of male and female incomes (rendered in total and by gender-pay-gap) is featured on the website. The Gender Pay Gap is calculated according to formula 1.

$$(1) \text{ Gender Pay Gap} = \frac{(\text{Income}_{\text{MedianMonthlyMen}} - \text{Income}_{\text{MedianMonthlyWomen}})}{\text{Income}_{\text{MedianMonthlyMen}}} * 100$$

² For 22 of the 25 displayed countries, this is the year 2017. For Germany, the Czech Republic and the United Kingdom, the most recent available data are from the years 2014, 2015 and 2016 respectively. All incomes are expressed in prices of 2017.

³ Average hourly wages are displayed on the website (arithmetic mean), not the hourly wages of median monthly incomes.

Added to this, two comparative figures are shown: the middle income of the entire EU as well as the at-risk-of-poverty threshold (abbr.: poverty threshold) values for EU countries. The poverty threshold is defined as 60% of median income.

4) How are data for different countries brought into comparable form?

Income data on the website are presented in Euros, all incomes stemming from non-Euro-countries were converted into Euros following current exchange rates. Technicians working in Austria can compare their income to that of Medical Doctors working in Austria. Given that they are aware of Austrian price levels, they are able to estimate how much the difference in income amounts to.

However, due to the fact that not all countries have the same price level, different incomes cannot as easily be compared across countries. For this reason, we have adjusted incomes for the different price levels. Following this adjustment, they are no longer displayed in Euros, but presented in purchasing power standard (PPS). PPS designates an artificial currency unit – theoretically, 1 PPS buys the same amount of goods and services in every country (EUROSTAT, 2014).⁴ It follows that incomes in countries with lower price levels will increase after being transformed into PPS, while incomes in countries with higher price levels will decrease. The median income of Austria (2237 EUR), for example, becomes 2031 PPS currency units, while the median income of Portugal (791 EUR) is converted into 970 PPS. The Austrian median income remains higher than the Portuguese median income in this example, even after being adjusted for the respective price levels.

Sources

EUROSTAT (2014) *Glossary: Purchasing power standard (PPS)*, Available at: <https://tinyurl.com/y63dhbs3> (last accessed: 26.06.2019).

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EUROSTAT (2019) *Information on Data*, Available at: <https://tinyurl.com/y2bt7zzk> (last accessed: 26.06.2019).

ILO (2016) *ISCO-08 Structure, index correspondence with ISCO-88*, Available at: <https://tinyurl.com/y7o7r4b3> (last accessed: 26.06.2019).

Statistik Austria (2019) *SILC*, Available at: <https://tinyurl.com/yb2g8aaq> (last accessed: 26.06.2019).

⁴ Purchasing power standards are calculated by dividing incomes by so called purchasing power parities (PPP); PPP are defined as the necessary amount of currency units (e.g. Euros) required to purchase a specific amount of goods and services. In that sense PPP can be regarded as the exchange rate for PPS to Euro (EUROSTAT 2014, 2018).